DOCUMENT RESUME

ED 397 918 JC 960 543

AUTHOR	Houston, Linda, Ed.
TITLE	OATYC Journal, Volume XX, Numbers 1-2, Fall 1995-Spring 1996.
INSTITUTION	Ohio Association of Two-Year Colleges.
PUB DATE	96
NOTE	118p.
PUB TYPE	Collected Works - Serials (022)
JOURNAL CIT	OATYC Journal; v20 n1-2 Fall 1995-Spr 1996
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Community Colleges; Distance Education; Engineering Education; Nursing Education; Tech Prep; Total Quality Management; Two Year Colleges
IDENTIFIERS	Ohio

ABSTRACT

Published by the Ohio Association of Two Year Colleges, this journal provides a medium for sharing concepts, methods, and findings relevant to the classroom and an open forum for the discussion and review of problems. This volume consists of the fall 1995 and spring 1996 issues and provides the following articles: (1) "FOCUS: OMI College of Applied Science University of Cincinnati, A Leader in Engineering," by Victoria Reynolds; (2) "An Afternoon in the Life of an Instructor," by Robert Pond; (3) "When the Landlord Says Call 911: Nursing Program Contracts with Clinical Agencies," by Larita Kaspar, Maureen A. Heuler, and Mary Ellen Waithe; (4) "Whips, Chains, and Other Motivational Teaching Tools," by Ron Luce; (5) "Implementing TQM in Two-Year Colleges," by George Kreps; (6) "Using Global Student Rating Items for Summative Evaluation," by William E. Cashin and Ronald G. Downey; (7) "The Simultaneous Teaching of Accounting and Economics to the Two-Year Student," by Ralph Lindeman; (8) "FOCUS: The Ohio State University at Mansfield-A Solid Institution of Higher Learning," by Rodger Smith and Beth Enders; (9) "Teaching and the Electric Current," by Kent L. Zimmerman; (10) "Tech Prep-One Year Later," by Darius Rastomji and Valerie Frear; (11) "The Clermont County Distance Learning Network," by Patricia E. Friel; (12) "Grammar Making a Comeback," by Bill McCleary; and (13) "Business Management Shadowing Experience," by Thomas E. Marshall. Each issue also contains articles by two educators representing conflicting positions on selected issues; this volume addresses the Internet as an instructional and marketing tool and whether two-year colleges or corporations are in the best position to provide continuing education. (BCY)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 397 918

OATYC Journal
Volume XX, Numbers 1-2
Fall 1995-Spring 1996

BEST COPY AVAILABLE

JC 960 543

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

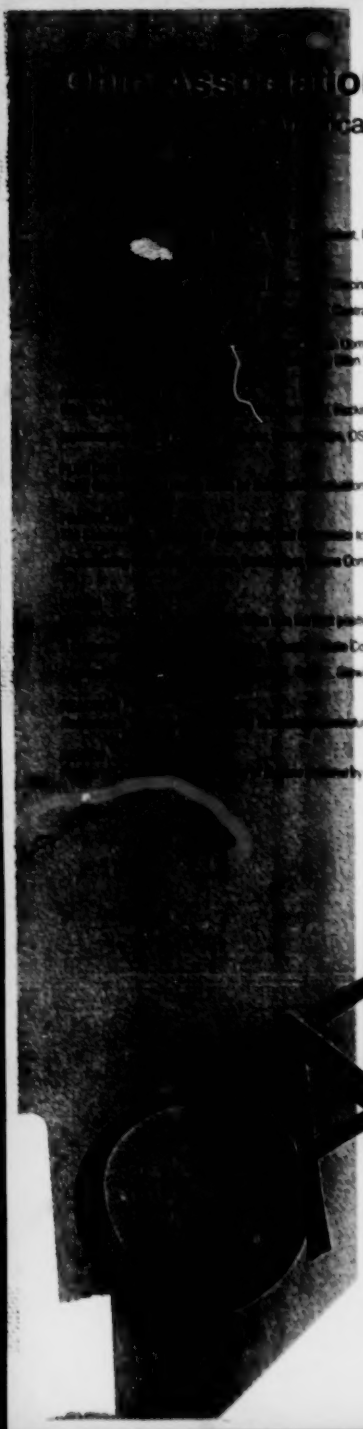
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J.D. Fullen

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



Ohio Association of Two-Year Colleges

American Association of Community Colleges

Vol. XX No. 1 Fall 1995

...ent, Lorain County Community College

...cinnati, Victoria Reynolds, College of Applied Science, University of Cincinnati
...eral Ohio Technical College

...Community College
...lliam Walthe, Cleveland State University

...Hocking College
...OSU, Agricultural Technical Institute

...ation, William Cashin and Ronald Downey, Kansas State University

...ges to the Two-Year Student, Ralph Linderman, Kent State University, Geauga Campus
...Community College

...position to provide continuing education, two-year colleges or corporations?
...Community College
...Steward, Columbus State Community College

...ulum, *Networking and Computer Repair*," Ed Bott, Lima Technical College

...ed by Inez Cordozo-Freeman, Roy Bentley, Central Ohio Technical College

OYC JOURNAL

20TH ANNIVERSARY

BEST COPY AVAILABLE

OATYC

Provides:

- Collective influence on the future direction of Ohio's two-year campus system;
- Access to classroom liability insurance protection of $1,000,000;
- An open forum for the discussion of trends, problems, accomplishments, and challenges unique to state assisted two-year campuses;
- A newsletter which informs members of the proceedings and activities of the OATYC and of Ohio's two-year campuses;
- The *Journal* which provides an opportunity for publication and exchange of scholarly views and concepts;
- Conference and workshops providing opportunities for professional development, visits to other two-year campuses, presentation of papers, and socialization with other two-year campus personnel;
- Affiliation with the American Association of Community Colleges and its activities throughout the nation.

Purposes:

- To provide a forum in which all state-assisted two-year campuses can meet to discuss and resolve mutual problems;
- To foster cooperation and communication among Ohio's institutions of higher education;
- To provide the viewpoint of the state assisted two-year campuses to the Ohio Board of Regents and to the State Legislature;
- To identify and improve the status, prestige, and welfare of all state-assisted two-year campuses in Ohio;
- To cooperate with other Ohio agencies, colleges, and universities in research and activities that promote the effectiveness of higher education in Ohio;
- To increase the contribution of the state-assisted two-year colleges to the total educational process in the state of Ohio.

Institutional Members

Belmont State Community College
Wes Channell, President
Bowling Green State University
Firelands Campus
Robert DeBard, Dean
Central Ohio Technical College
Rafael Cortada, President
Clark State Community College
Albert A. Salerno, President
Columbus State Community College
Harold M. Nestor, President
Cuyahoga Community College,
Jerry Sue Thornton, President
Edison State Community College
Kenneth Yowell, President
Hocking College
John * Light, President
Jefferson Community College
Edward L. Florak, President
Kent State University
Ashtabula Campus
John Mahan, Dean
Kent State University
Tuscarawaras Campus
Harold Shade, Dean
Lakeland Community College
Ralph R. Doty, President
Lima Technical College
James J. Countryman, President
Lorain County Community College,
Roy Church, President
Marion Technical College
J. Richard Brown, President
Miami University
Hamilton Campus
Harriet Taylor, Executive Director
Miami University
Middletown Campus
Michael Governanti, Executive Director
Muskingum Area Technical College
Lynn H. Willett, President
North Central Technical College
Bryan E. Kee, President
Northwest State Community College,
Larry G. McDougle, President
Ohio State University
Agricultural Technical Institute
William Anderson, Director
Ohio State University
Lima Campus
Violet Mock, Dean
Ohio University
Chillicothe Campus
Delbert E. Myer, Dean
Ohio University
Eastern Campus
James Newton, Dean
Ohio University
Lancaster Campus
Joe Tucker, Interim Dean
Owens State Community College,
Daniel Brown, President
Rio Grande Community College,
Barry Dorses, President
Sinclair Community College
David H. Pontz, President
Southern State Community College
George McCormick, President
Stark Technical College
John J. McGrath, President
Terra State Community College,
Charolette Lee, President
The University of Akron,
Community & Technical College
Fred Sturm, Dean
University of Akron, Wayne College
[redacted]
University of Cincinnati
Clermont Campus
Roger Barry, Dean
University of Cincinnati,
OMI College of Applied Science
Fredrick Kryman, Dean
University of Cincinnati,
Raymond Walters College
Roger Barry, Acting Dean
University of Toledo,
Community & Technical College
Mary Ellen Edwards, Dean
Washington State Community College
Carson Miller, President
Wright State University, Lake Campus
Greg Schumm, Dean

* Thanks go to Glen Funk, Engineering Technologies, Central Ohio Technical College, Newark for our new look.

JOURNAL

OF THE

Ohio Association of Two-Year Colleges

(Affiliate of the American Association of Community Colleges)

VOL. XX NO. 1 Fall 1995

The *Journal of The Ohio Association of Two-Year Colleges* is published by the Association to provide the two-year colleges of Ohio with a medium for the sharing of concepts, methods and findings relevant to the two-year college classroom and to provide an open forum for problem discussion and review.

Subscription is part of the OATYC active, associate, or institutional membership. However, single copies of the *Journal* are available at $3 each. A yearly subscription is available for $6 to persons or organizations who do not want membership in the OATYC. Postage is prepaid on all orders within the U.S.; $.50 per year is added for Canada, $1 per year for all other foreign countries. Communications regarding orders, special subscriptions, single copies, advertising, and permission to reprint are to be addressed to:

The Ohio Association of Two-Year Colleges
c/o Russell K. Davis, III
University of Akron Community and Technical College
Polsky M169
Akron, OH 44325-6002

Journal Officers
[illegible] Editor, Central Ohio Technical College
Linda Houston, Assistant Editor, The Ohio State University Agricultural Technical Institute
Tara Finley, Production Editor, Columbus State Community College

Editorial Board
Anna Maria Barnum, University of Akron Community and Technical College
Marc Green, Cincinnati Technical College
Judy Hanneken, Community and Technical College, University of Toledo
David Humphreys, Cuyahoga Community College, Eastern Campus
Jack Tabor, Columbus State Community College

Readers
Gordon Brooks, Columbus State Community College
John Fallon, Lima Technical College
Jack Metcalf, Central Ohio Technical College
Carlos Tackett, Lakeland Community College

OATYC Journal, Fall 1995
Table of Contents

COMMENT

AACC's Call to Action
Marilyn Valentino, President OATYC, Lorain County Community College 3

TEXT

FOCUS: *OMI College of Applied Science University of Cincinnati,*
Victoria Reynolds, College of Applied Science, University of Cincinnati 9

An Afternoon in the Life of an Instructor,
Robert Pond, Central Ohio Technical College 19

When the Landlord Says Call 911, Larita Kaspar, Lorain Community College, Maureen Heuler, Lorain Community College, and Mary Ellen Waithe, Cleveland State University 23

AWARDED ARTICLES

Whip, Chains and Other Motivational Tools, Ron Luce, Hocking College 29

Implementing TQM in Two-Year Colleges, George Kreps, OSU, Agricultural Technical Institute 33

PLUS ONE

Using Global Student Rating Items for Summative Evaluation
William Cashin and Ronald Downey, Kansas State University 40

PRACTICUM

The Simultaneous Teaching of Accounting and Economics to the Two-Year Student, Ralph Lindeman, Kent State University, Geauga Campus 54

Disseminating Institutional Research, Derick Kiger, Owens Community College 58

FORUM

ISSUE: Competition or Cooperation: Who is in the best position to provide continuing education, two-year colleges or cooporations?

A Cooperative Venture, Barb Thompson, Columbus State Community College... 61

Corporations Need an In-house Teaching Staff,
Trina E. Steward, Columbus State Community College..... 62

REACTION

Response to "Diversity in Engineering Technology Curriculum: Networking and Computer Repair," Ed Bott, Lima Technical College 63

REVIEW

Review of Chief: The Life and History of Eugene Delorme by Inez Cordozo-Freeman, Roy Bentley, Central Ohio Technical College 65

COMMENT

AACC's Call to Action: Critical Issues, Fundamental Change, and Key Legislation

Marilyn J. Valentino

CRITICAL ISSUES

"You are at the fault line in America," President Clinton proclaimed to nearly 2200 members of the American Association of Community Colleges in Minneapolis last April. "The fault line of American society is education. Those who have it are doing well. Those who don't are paying." Yes, we are critical to our students' success and to America's prosperity. We are the entry point for over 10.7 million Americans or 49% of all first time freshmen, who are mostly part-time (63%) and mostly female (*Pocket Profile of Community Colleges: Trends and Statistics 1995-1996*). Yet, as we look into the future, the faces of those students will be changing; they will be increasingly minority and older than their present 29 years. Our classrooms will expand into cyberspace and "shadow colleges." Our programs will become more customized with more options. Our institutions will become more market driven and entrepreneurial. How will we ensure our own survival? "The most successful institutions," said Albert Lorenzo, President of Macomb Community College, will be those that are "able to emulate the direction, pace, and proportion of societal change around them." If we neglect to heed this call for action and fundamental change, not only our students but our very institutions may be teetering at the fault line. He offers these guidelines for building a culture of responsiveness:

Marilyn J. Valantino

TEN ELEMENTS FOR FUNDAMENTAL CHANGE

1. THINK HOLISTICALLY. Although our mission and our actions are more connected to our communities than perhaps four-year institutions, we need to shift from thinking of ourselves as independent institutions to being an interactive component of the social and political framework.
2. STREAMLINE GOVERNANCE. Instead of stalemating in drawn out procedures and internal politics, we need to streamline information processing and decision making to take advantage of training and other educational opportunities that will go to private consultants if companies are made to wait..
3. REDEFINE ROLES. The practice of administrators and faculty operating only within their separate departments will be seen as a past luxury. Roles will be redefined and work redesigned into cross-disciplinary teams and specialists not only in a discipline but also in assessment, etc.
4. DIVERSIFY FUNDING. Since state and local funding is being reduced, we need to diversify—use outsourcing, privatization, and entrepreneurial partnerships.
5. PROVIDE MORE OPTIONS. Because many of our students are nontraditional and have families and jobs and because society itself is demassifying, students are expecting more options, customized programs, and quick and convenient service.

6. ASSURE RELEVANCY. We need to ensure that we can "adjust with speed and dexterity to marketplace demands."
7. APPLY TECHNOLOGY. The key factor in future teaching and learning is computers and communication technologies that can be applied immediately in the workplace.
8. CULTIVATE NEW RELATIONSHIPS. Community colleges need to analyze how they are building relationships within their colleges and in the public and private domain.
9. CHANGE SUCCESS CRITERIA. Colleges need to develop more precise measurements of outcomes.
10. FACILITATE CONTINUOUS LEARNING. In order to keep current and strong, colleges must switch from "sporadic and voluntary patterns" of professional development to a more comprehensive learning requirement for all employees.

[From *A Framework for Fundamental Change in the Community College* by Albert L. Lorenzo and Nancy Armes LeCroy. The Institute for Future Studies, Macomb Community College. Copies are available from AACC Publications (410546-0391).]

KEY NATIONAL LEGISLATION

The 104th Congress has written legislation to slash higher education by $ 16 billion. The House cut $ 1.68 billion from the Department of Education budget while the Senate proposed $418 million. Both House and Senate bills have dropped important vocational education and literacy programs. The Tech Prep program was saved, however, after much lobbying. Besides direct hits to education, the House has recommended $2.2 billion cut from employment and training programs for disadvantaged youth. Job training, welfare, and vocational funding reductions, of course, both directly and indirectly affect community college enrollment. The AACC joined the Alliance to Save Student Aid to lobby against these proposed threats to education. It is our responsibility to join the fight and support the following positions of the AACC and ACCT (American Association of Community College Trustees):

1. PELL GRANTS. Support the Clinton Administration's $2620 Pell Grant maximum for FY 1996.
2. TITLE III. Maintain Part A of Title III of the Higher Education Act(instead of a two-year phase out).
3. JOB TRAINING. Ensure that community colleges will be eligible providers of education and training and governance of any new job training system. Perkins Act monies should continue.
4. VOCATIONAL ED. Keep the Tech-Prep program and federal funding a part of vocational education offered by community colleges. Increase monies for the new School-to-Work Opportunities Act.
5. WELFARE REFORM. Allow welfare recipients who maintain appropriate standards of academic progress enough time to finish their education and training.
6. NATIONAL SCIENCE FOUNDATION. The NSF has supported national and regional centers of excellence in Advanced Technological Education, the development of materials, science instrumentation, and curriculum and conferences. The NSF

FIVE "HOT PROGRAMS" OF 1994

1. Dental Hygiene
2. Nuclear Medicine Technician
3. Nursing
4. Physical Therapy Assistant
5. Robotics / Automated

(Source: *AACC Hot Programs Survey, 1994*)

should keep its current funding of $35 million for 1996 for the ATE program. Also, argue for a budget of $35 million for the Scientific and Advanced Technology Act, PL 102-476, which endows scientific programs at associate degree colleges.

7. INTERNATIONAL EDUCATION. Maintain budgets for the College and University Affiliations program at the US Information Agency, which includes Fulbright-Hayes programs, and also Title VI funding.
8. ADULT EDUCATION ACT. Reauthorize and restructure the Act, taking into account the significant part community colleges have in meeting adult needs.
9. TAX-FREE EMPLOYER PROVIDED EDUCATION. Make permanent Section 127 of the Internal Revenue Code, accepting $5250 tax-free benefits.

To learn the current status of the legislation above, contact your college president and federal representatives or the AACC at One Dupont Circle, NW, Suite 410 Washington, DC 20036 or phone: (202) 728-0200.

OHIO'S STATE BUDGET DEVELOPMENTS

The FY96-FY97 Ohio State Budget was signed into law by Governor Voinovich this summer. According to Terry M. Thomas, Executive Director of the Ohio Association of Community Colleges, "The budget is the best for higher education in this decade." He has offered a summary of some wins and losses below, along with pending legislation:

- INSTRUCTIONAL SUBSIDY. There has been an overall increase in higher education instructional subsidy of 7.6% in FY96 and 6.2% in FY97. Performance Funding will be awarded for two years as follows: $1.5 million and $3 million, although "Funding for Change" was not funded.
- OHIO INSTRUCTIONAL GRANTS were increased by $2 million (3.8% and 6.8%), with part-time student grants up by $1.4 million (+15.7% in 96 and +6.7% in 97). The income eligibility ceiling was raised from $2000 to $30,000 per year by FY97. Also, part-time students are eligible for the National Guard's Tuition Grant Program.
- ARTICULATION AND TRANSFER COUNCIL maintained its $200,000 budget.
- PRODUCTIVITY IMPROVEMENT CHALLENGE FUNDS for workforce development were restored in year two.
- FEE ASSUMPTION. Community colleges and OACC successfully lobbied for a reduction of the undergraduate fee assumption by $75 year one and $50 year two; however, they had hoped for $100 and $200, respectively.
- EDUCATION FOR THE INCARCERATED funding survived for the next two years, but the program will be analyzed by a committee of legislative, administrative, and institutional representatives, and no new degree programs may begin.
- WORK-TO-SCHOOL PROGRAM, recommended by the Board of Regents, was not granted by the Executive or the General Assembly.
- CONSTRUCTION PROJECTS will be supervised locally if $4 million or under for new projects or $1.5 million for renovations. (Previous ceilings were $1.5 and $.5 million.)

WHAT'S AHEAD THIS DECADE

1. Service Learning
2. Enterpreneurial Programs/Business Partnerships
3. Distance Learning thtough Virtual Classrooms and "Shadow Colleges"

PENDING LEGISLATION (quoted from Terry M. Thomas, Executive Director of OACC)

1. LIABILITY FOR STUDENT EXPRESSION. H.B. 159 (Rep. Batchelder) would limit the restriction of student expression . . . and permit a civil action by a student aggrieved by restrictions of expression that violate state law.... the bill should be amended so that institutions are not held liable for actions by their student organizations.
2. ENGLISH AS THE OFFICIAL LANGUAGE IN OHIO. H.B. 273 (Rep. Terwilleger) would require public higher education institutions to refund tuition and fees if the student cannot reasonably understand the spoken language used by the professor, teaching assistant, or other teaching personnel. The bill has passed the House, but the Governor has indicated his intent to veto.
3. MEMBERSHIP DUES FOR EDUCATIONAL ASSOCIATIONS H.B. 329 (Rep. Gerberry) would require state and local public employers to make payroll deductions authorized by employees to pay membership dues in education and professional associations.
4. ELIGIBILITY FOR OIG GRANTS. S.B.32 (Sen. Watts) would require students graduating on or after 9/15/98, to pass the statewide 12th grade proficiency tests at the 12th grade competency level to receive Ohio Instructional Grants or Ohio Student Choice Grants.
5. SCHOLARSHIP FUND. S.B. 87 (Sen. Nettle) would create the Ohio Higher Education Scholarship Fund.
6. STRIKES. S.B. 113 (Sen. Snyder) would prohibit strikes by school district employees and establish an additional level of mediation. (May consider expanding the provisions to include college and university employees.)

Terry M. Thomas will be speaking at our OATYC fall conference at Clark State Community College in Springfield on Friday, October 27. You will be able to ask him what bills have become law and how we can become more proactive in the Ohio House and Senate.

Until then, I urge you to learn more about these bills, share the information with colleagues, and express your concerns to your representatives—NOW!

Marilyn J. Valentino, OATYC President
Lorain County Community College
1005 N. Abbe Road
Elyria, OH 44035

INFORMATION FOR PROSPECTIVE CONTRIBUTORS

The *Journal* encourages submission of material for any of its sections by faculty, staff, administrators and trustees of any of Ohio's community, general and technical, junior, regional and technical campuses. The *Journal* is particularly receptive to articles of general professional importance in the areas of administration, instruction, and baccalaureate or technical studies for two-year institutions.

There are forty-seven solicitors of editorial material listed here. Contact your campus solicitor or one nearest you to inquire about submitting a specific manuscript.

Manuscripts must be typed, double-spaced and of approximately 1,000-3,000 words in length. All submissions must be accompanied by a stamped, self-addressed envelope for return. Art work must be black and white. Photos glossy; tables and drawings on 8½ by 11 paper. The name and address of the contributor should be on the back of all art copy.

Editorial Policy

The *Journal* is not responsible for manuscripts or materials lost in mailing nor is it responsible for returning items not accompanied by a stamped, self-addressed envelope.

The *Journal* reserves the right to edit manuscripts to meet its needs and objectives. Where major revisions are necessary, every effort will be made to clear the changes with the author.

Submission deadline for the next *Journal* is March 15, 1996.

JOIN

OATYC

OATYC Application for Membership

☐ I am enclosing $25 for regular membership dues for 1995-96.
☐ New Member
☐ Membership Renewal

College Address _____

Name _____

Please Print

Title/Specialty _____

Two-Year Campus _____

City _____ State _____ Zip _____

C/O Russell K. Davis, III. University of Akron, Community and Technical College, PolskyM169, Akron OH 44325-6002

Professional Liability Protection Plan for Educators

Offered to Employees of OATYC/AACC Member Colleges

The Educators Professional Liability Plan covers the acts or omissions of the enrollee and protects the enrollee for the acts of anyone under his or her supervision. This Plan also assists the enrollee to protect his or her job.

1. Your choice of $500,000 or $1,000,000 in protection. Defense costs are paid in addition to this amount. This amount is for all claims during the Plan year. If you supervise other employees and are sued by one of them, the Plan provides 90% or $2,500, whichever is less, for defense costs ($100 deductible to be paid by you). The maximum $500,00 or $1,000,000 amount still applies to damages.

2. The Plan provides protection against claims under the following provisions:
   - The occurrences take place on or after the effective date of the policy.
   - The claim, or written notification of circumstances which could reasonably give rise to a claim, is first made by or against the insured during the agreement period or within 60 days after expiration or termination of the agreement.

3. The Plan will pay up to $50 for your initial consultation with an attorney and it will pay up to $250 of the cost of having an attorney represent you at a formal hearing of a school board or other authority if you are threatened with termination reassignment or demotion. You will also receive up to $250 for legal fees, subject to a $100 deductible, if you decide to sue.

NOTE: Members whose primary employment is with an educational organization may cover part-time educational jobs (consultant, tutor, teacher) by paying an additional $40 for the $500,000 benefit or $70 for the $1,000,000 benefit.

PROFESSIONAL LIABILITY PLAN ENROLLMENT FORM

A special Membership Services Plan of Ohio Association of Two-Year Colleges; American Association of Community Colleges

Name _____

Institution _____

Address _____

City _____

State, Zip _____

Birth Date _____ Social Security No. _____

Date Signature _____

Regular Coverage – $500,000/$500,000 Coverage @ $40 per year ☐

Including Part-time private Consultants $500,000/$500,000 Coverage @ $80 per year ☐

Regular coverage – $1,000,000/ $1,000,000 Coverage @ $70 per year ☐

Including part-time private consultants $1,000,000/$1,000,000 Coverage @ $140 per year ☐

Coverage becomes effective the first of the month following receipt of enrollment form and payment in full mailed to office designated on the back of this form. Please do not mail this form if you are currently insured by this plan; you will automatically receive a renewal notice. Coverage extends for a full 12 months. Send your enrollment form and check payable to: Forrest T. Jones and Company, Inc., P.O. Box 418151-3130 Broadway, Kansas City, MO 64141-9151. Phone: 1-800-821-7803.

TEXT

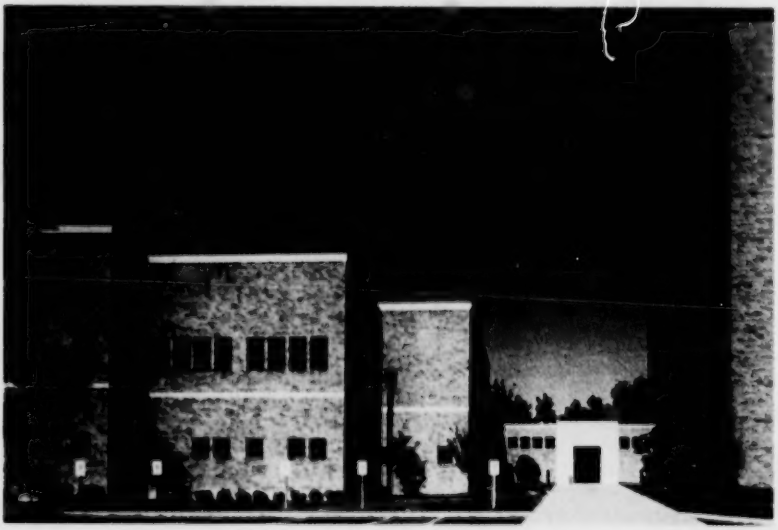
FOCUS: OMI College of Applied Science University of Cincinnati, A Leader in Engineering

Victoria Reynolds

On November 10, 1828, the constitution of the Ohio Mechanics Institute (OMI), the parent institution of the College of Applied Science, was adopted in the Cincinnati City Council Chambers. The Ohio Mechanics Institute was incorporated by the Ohio Legislature in February, 1829, making it the oldest technical institute West of the Alleghenies and the sixth oldest in the United States. Victoria Reynolds introduces the College of Applied Science, University of Cincinnati.

INTRODUCTION

The OMI College of Applied Science, a leader in engineering technology education for over one hundred and sixty years, offers both associate and baccalaureate degree programs in the engineering technologies and related areas with the aim of preparing individuals for careers as engineering technologists and engineering technicians. The College has much to offer students interested in intellectual and personal development. Engineering technicians, graduates of the associate degree programs, are problem solvers whose work is directed primarily toward the practical applications of engineering. Their academic program includes



The College of Applied Science as seen from Victory Parkway.

mathematics, applied science, and technical courses in a specific engineering technology area with emphasis on technical support.

Graduates of the baccalaureate degree programs are engineering technologists whose education is based on engineering theory but focused on the "hands-on" aspect of the technology. This academic program includes mathematics through differential and integral calculus, applied sciences, and technical courses which emphasize application of technical knowledge and methods to current industrial problems.

Students enjoy the courtyard at the College of Applied Science.

The College's job placement rate and starting salaries for its associate and baccalaureate graduates are among the highest in the University. Since 1976, an average of 96% of the students have obtained jobs in their academic fields soon after graduation.

HISTORY

The OMI was established for "advancing the best interest of mechanics, manufacturers, and artisans by the more general diffusion of useful knowledge in those important classes of the community." During the winter of 1828-29, classes were offered three nights per week in chemistry, geometry, and arithmetic. However, the nucleus of the school was its technical library and reading room — an apprenticeship library which contained the latest materials in the area of mathematics and science.

From these beginnings grew the College of Applied Science and other long-lasting Cincinnati institutions. The Cincinnati Art Museum, the Cincinnati Public Library, and the Cincinnati Music Hall are all offsprings of the Ohio Mechanics Institute. OMI's apprentice library — where a young telegrapher's assistant, Thomas Edison, used to study — was joined with the Cincinnati Family and School Library in 1857, and the present Cincinnati Public Library began.

The science exhibitions started by OMI in 1837 continued for 41 years and set the pattern for world fairs and other major exhibitions. In 1838, the Institute held its first industrial exhibition for the benefit of the manufacturers, artisans, and artists of the western country. The first poster announced that the Ohio Mechanics Institute would sponsor an annual exhibition where ingenious mechanics, artisans, and artists might find an opportunity to have their respective merits known and appreciated by the community at large. In 1870, OMI joined the Cincinnati Chamber of Commerce to revive the OMI Industrial Expositions, which had been discontinued during the Civil War. The Ohio Mechanics Institute fairs were so popular that they were expanded into what is known as the great World's Fairs.

In 1919, the institute began two intensive industrial engineering courses in mechanical and electrical engineering. The courses, forerunners of associate degree programs in engineering technology, were designed for high school graduates who had already acquired some industrial experience but who needed basic technical training. Both programs emphasized laboratory and drafting experiences and shop practice. Courses in physics, chemistry, and mathematics offered supporting instruction.

In November of 1948, the Institute became one of the first of its type to receive accreditation from the Engineers Council for Professional Development, and in 1951, awarded its first associate degrees in electrical and mechanical engineering technology. Eventually, additional associate degree programs were added, including Chemical Technology, Civil Engineering Technology, Architectural Technology, and Building Construction Technology.

In 1958, the name of the day programs was formally changed to the Ohio College of Applied Science while the evening program maintained the Ohio Mechanics Institute name. The two divisions continued to operate as private

Rear view of the College of Applied Science and its glass-enclosed student lounge and study area.

institutions until 1969, when OCAS/OMI became the 16th college of the University of Cincinnati.The college officially changed its name to the OMI College of Applied Science (CAS) in 1980.

A view of the beautiful Ohio River from the College of Applied Science.

LOCATION

The original home of the Ohio Mechanics Institute was in The Bazaar Building on the riverbank, what is now Second Street. After several other locations, the college moved to a building, located downtown on Cincinnati's Central Parkway and donated by a Cincinnati philanthropist, Mary Emery. The College remained there for 78 years while establishing itself as a leader in engineering technology education. The cornerstone ceremony for the new Victory Parkway campus, a four-building complex with newly-built laboratories, took place in October, 1988.

The Victory Parkway campus is located in one of the finest areas of the city, surrounded by parks, museums, and unsurpassed views of the Ohio River. Some have suggested that our motto be "college with a view."

Also advantageous to faculty and students is the five-minute drive time to the University of Cincinnati's Clifton campus and to downtown Cincinnati. A College of Applied Science student has access to the resources and activities of a major university, and, at the same time, can enjoy the friendly atmosphere and convenience of a small college.

COURSES OF STUDY

The College of Applied Science provides education and training in engineering technology at the associate, baccalaureate, and master's level to 1400 full and part-time students. Motivated by the increasing importance of technology in our society and the need for competent, educated engineering technologists, the College introduced baccalaureate degree programs in Mechanical Engineering Technology, Electrical Engineering Technology, and Construction Management in 1974. Other

CAS associate degree programs developed into baccalaureate programs in following years: Fire Science Technology in 1975 and Architectural Engineering Technology in 1976. Chemical Technology began its baccalaureate degree program in 1994.

Instruction for students also includes non-degree credit courses, extended specialized courses for particular industries, short courses, and engineering technology workshops. Non-degree programs include: Communication Electronics, Digital Electronics, Electronic CAD Technology, Instrumentation and Control Technology, Manufacturing Processes, Plastics Technology, Technical and Professional Communication, Boiler Operator's License, Computer aided Design Drafting, Industrial Electricity, Industrial Heating, Ventilating and Air Conditioning, Machine Tool Operations, Plant Maintenance, Tool and Die Design, Welding, and

The College of Applied Science.

Wood Technology. Day and evening classes are provided to a student body of both traditional high school graduates and a significant population of adult students.

All of the College's degree programs are accredited by nationally recognized accrediting agencies. For many decades the College and its faculty have been closely involved in helping set the direction and ensuring the quality of engineering technology education locally, regionally, and nationally. This participation is maintained through involvement in the appropriate accrediting bodies as well as through many organizations and societies related to the disciplines represented by the College's academic programs.

At the College of Applied Science, "hands-on" programs produce confident graduates. The College seeks to go even further, however, by putting activities in the curriculum that encourage speaking, writing, and computing across the curriculum. All CAS baccalaureate graduates take three quarters of English, at least one speech course, and at least four courses in the humanities, besides extensive class work in mathematics, science, and technology. The challenge is to create an engineering

The Timothy C. Day Technical Library at the College of Applied Science.

technologist who can solve real world problems with innovative, humane, and thoughtful methods.

FACULTY

The College boasts of its superb faculty and, beginning in freshman year, students have easy access to full-time faculty members. Many of the faculty have earned Ph.D.'s or professional standing in their fields. All faculty post "office hours" outside their office doors, and many faculty offices are located right next to classrooms and laboratories. The College values consistent and certain interaction between faculty and students.

Applied Science faculty constantly update their courses to stay current with the needs of industry, and this often means forgoing the use of textbooks. Often the information in textbooks is three to four years old, so faculty create their own course packets.

Traditional classroom and laboratory teaching have been, and are, the faculty's central activities. Laboratory courses taught within the College range from freshman

courses through graduate courses, and meet from two to six hours. Because of the applied nature and laboratory driven character of the College's academic programs, all instruction, including laboratory sessions, is provided by regular faculty rather than by graduate or undergraduate student assistants. Faculty work may involve activities in other supporting laboratories such as computer laboratories, computer-aided drafting laboratories, writing laboratories, electronic presentation laboratories, and math learning laboratories. A wide range of learning formats are used in the College.

THE LIBRARY — BRINGING OUT EXCELLENCE IN THE ENGINEERING TECHNOLOGIST

From the base of mathematics, science, and communication skills, the College of Applied Science strives to develop the engineering technologist who seeks excellence. To further ensure the quality of its graduates, the College encourages "information literacy" through numerous library programs. Research shows a strong correlation between frequent library use and employee achievement, and the bright, spacious, and comfortable College of Applied Science library encourages frequent use and offers a trained and helpful library staff to guide the novice and the sophisticated researcher through a rich variety of information resources.

OHIOLINK, one of the offered services, is a statewide library and information network that links university and college research libraries and the state library of Ohio. Its features include an on-line central database of the holdings of member libraries, on-line access to research and reference databases, a document delivery service for books, periodical articles, and other materials, and user-initiated on-line borrowing. Also in use is an internet gopher that opens a vast world of resources: 6,000 linked computer networks spanning 26 countries, on-line catalogs of many

An Architectural Engineering Technology senior displays his design project, "Newport Riverfront Condos" at Tech Expo '95.

libraries all over the world, academic discussion lists and interest groups, electronic journals and newsletters, and a remote terminal connection service.

Also, the CAS library has access to an extensive CD-ROM network and to the CARL/UNCOVER service which contains more than 4,000,000 citations for journal articles published in more than 14,000 journals. A student can order the complete text of any article in the database and articles will be delivered within 24 hours to a designated FAX number.

The CAS Library currently reaches all Freshmen with a series of presentations that cover the following topics: understanding the organization and structure of information; locating and retrieving resources through on-line catalogues and journal resources; and evaluating resources to select appropriate information. Through this series students are given the tools for lifelong learning and the skills to become achievers in their future professions.

PROFESSIONAL PRACTICE PROGRAM

The College's mission is, also, reflected in its long successful history of cooperative education, a learning experience which enables students to integrate academic with on-the job training. In 1934, the co-op program began at OMI and today it is one of the most comprehensive departments in its field, working with more than 120 employers each year and offering many services and resources to students and alumni:

-Professional Development I-A prerequisite course for co-op participation that carries one credit hour and serves as career orientation vehicle.

-Professional Practice-A program that coordinates all cooperative education at the college, including job development and evaluation of performance.

-Herman Schneider Employment Interface Laboratory-A state-of-the-art electronic employment interface system allowing students, alumni, and the community to interface with employers across the country.

-Disc Resume and Degree Plan-State-of-the-art software that allows a student to develop a professional resume, track course schedules for graduation, and download a resume into a national database for employers.

-Career Development Workshops and Career Counseling-A career development process that presents special interest offerings.

-Placement-A process that provides on-campus interviews and computer access to national organizations and available positions.

-Research-An essential part of the program that develops information about career paths, salary ranges, and the types of careers important to the 21st century.

The co-op program is designed to provide valuable work experience that adds to professional value upon graduation. The employer/student interest and match-up is paramount and, although jobs are not pre-selected for students, the Department makes every attempt to provide contact between parties of similar interests. While salaries are not the main factor in choosing the suitability of a working assignment, most students find that they can contribute substantially to their education through the professional practice program.

PROFESSIONAL PLACEMENT

The College's overall placement rate since 1976 is currently 96%, and three programs, Construction Management Technology, Architectural Engineering Technology, and Electrical Engineering Technology, reached a 100 percent placement rate in 1994.

Mechanical Engineering Technology senior with her project, "Stress Analysis of Combined Loadings."

OUTREACH TO BUSINESS AND INDUSTRY

At the College of Applied Science, the transfer of technology is a two-way process beneficial to both industry and education. CAS has a strong link with the business community based on years of working together. Industry advisory boards work with the departments to fine tune course offerings, and many area industries have made generous donations of expertise, equipment, and materials for student projects. Often these student projects lead to the development of new processes or equipment which benefits industry.

Mutually productive cooperation is a hallmark of the College. As industry supports regular college programs, the College provides special educational opportunities through workshops and training programs specifically tailored for company employees. For instance, the associate degree in manufacturing engineering technology evolved from courses originally developed for private industry.

The Microcomputer Applications Center is another College service offered to industry. The Center provides state-of-the-art analysis of computer software and hardware, conducts research of computer applications software and equipment, and makes objective recommendations to match industry needs to computer technology.

SENIOR DESIGN PROJECT

A special curriculum component is Senior Design. Under the guidance of an academic adviser, seniors in the engineering technology programs complete an extensive study that discovers a solution to a real life technical problem. Design projects may range in length from one quarter to an academic year, and the completed project must perform its function as intended in front of a faculty review committee. In some cases, students obtain sponsorships from companies that can benefit from their research.

Electrical Engineering Technology senior answering questions about his project, "Automated Assembly Line."

Every spring, each graduating senior presents a major technical project that becomes part of a collection of sophisticated and interesting works known as Tech Expo. It's an important day because the exhibits illustrate the College's mission more fully than any written statement ever could. Tech Expo gives seniors a chance to display their imaginations, their knowledge of science and mathematics, and their problem-solving skills to interested people from the college, the university, and the business community. It's a day of professional growth for our students, and a day of intellectual fun and activity for all who attend.

This formal interaction of students, faculty, and industry, so apparent at Tech Expo, is an essential element in the transfer of knowledge at the College of Applied Science. Tech Expo, the seniors' capstone experience, showcases the great qualities of the College as it encourages the students to face the challenge of communicating new technical information in their chosen fields.

Victoria Reynolds
Publications
College of Applied Science
OMI College of Applied Science
University of Cincinnati
Cincinnati, OH 45206

An Afternoon in the Life of an Instructor

Robert Pond

4 p.m.

One thing is clear their needs are great. I wonder, as I scan the too warm September classroom, whether I can help meet their needs this year. It is another Autumn quarter at one of the many medium-sized technical colleges in the Midwest, and I am administering a pretest to another section of thirty students. The students are all young compared to my age of fifty-plus; some of them are not feeling young, though, but rather as if it might be too late for them to begin a new career One of the students just gave up on her career as a "Carnie." (I find this out later in the day) She is about thirty and acts very nervous before beginning the exam, even though I assure the class that the pretest score will only be used to evaluate how much they learned from the course by comparing pretest and posttest scores at the end of the quarter. She has just begun to cough uncontrollably Other "older" students seem uncomfortable in their individual ways—squirming, dropping pencils, looking around as if to say, "What am I doing here?" The younger students, fresh out of high school, are bending to the all too familiar work, lending tacit approval to the process. They may feel that the questions are too easy, but from my experience I know that they will miss at least half of those "easy" questions— "just simple mistakes," they will say.

While the students labor over the exam's twenty multiple-choice questions, I think back over the score of years I have been teaching at the college. Reflecting on past experiences —especially the evolution of this particular course and the successes of previous students—always helps motivate me for the coming year's challenges. At first, our technical curricula did not contain the Introductory Engineering Technology Course I now instruct. We felt that our students already had a good idea of what they wanted to do; they could select their curriculum of interest—electronics, mechanical, manufacturing, or drafting and design— without our help. That unconsidered, but fully operational, concept seemed to work fine until an advisory committee meeting in the late 1970s. David, one of the members of the committee who was a student in Industrial Engineering Technology, was about to graduate. David had taken longer than three years to fulfill the credit requirements, even though he was a full-time student. One of the advisory committee members from industry asked David, " Why has it taken you so long to graduate?" David replied that, "I originally enrolled in the electronics curriculum because my father had pointed out that electronics is 'the wave of the future.'" But, after one year David found the electronics courses too abstract for him and had transferred to the more "concrete" Industrial Engineering Technology program. The industrial representative seemed surprised that no Introductory Engineering Technology Course was offered to let students know of the rather vast differences between the technologies. He pointed out, my four-year curriculum included an introductory Engineering course."

As Division Chairman at the time. I hastened to point out that most students seem to know what they want to do. "Besides, the faculty do not have enough time in a two-year curriculum to give career guidance," I contended. I felt the discussion closed. However, in spite of my good administrative sense of how things were and ought to be, the discussion rolled on. It became clear that, in order to show proper respect for the committee, I should at least study the effectiveness of an introductory Engineering Technology Course offering--attempting to answer such

questions as what the course curriculum would contain, what texts were available, what the engineering faculty thought of the idea, and what courses—or course credit hours—should be eliminated from each of the technical programs in order to make room for the new offering. Surprisingly, my informal feasibility study in the 1970s had revealed a plethora of needs not being met in the separate technologies. Aside from career instruction, the "other common needs" identified included improved calculator skills, experience converting units, basic technical problem solving, using the technical library, writing laboratory reports, an early introduction to trigonometry and geometry, a brief orientation to computer operating systems, and the use of typical application software. By combining career orientation with these other identified needs, the need for the Introductory Engineering Technology Course was established. Some of the instructional hours in the separate technologies were no longer necessary because of the new course, thus freeing up needed space in each of their curricula. The new "Introduction to Engineering Technology" course passed the Division Curriculum Committee with ease. Needless to say, the industrial representative on the advisory committee that originally recommended the course was pleased to see his recommendation implemented.

The next step was to have the college curriculum committee approve the course. General Studies faculty were not so sure about the proposed course. After all, were they not responsible for career guidance and some of the mathematics related instruction? Nevertheless, once presented with the idea of technical faculty reinforcing the need for the general course material early in the technical students education, the communications and mathematics faculty approved of the offering. The general studies faculty felt they needed all the help they could get in motivating their students to learn the concepts they would present later. We all know that general education concepts provide our students with the crucial knowledge and skills they will need in the future so they may effectively communicate with and learn from others.

The advisory committee meeting that led to the genesis of the Introductory Engineering Technology Course occurred more than fourteen years ago. I returned to the faculty ranks in 1985. Two years after that, I witnessed the faculty asking that the original two-contact-hour per week course be expanded to four. I remember being happily surprised by the request for more contact hours. I would have suggested adding contact hours myself, knowing how difficult it was to present all of the needed concepts in just two hours a week, but thought the proposal coming from me would appear selfishly motivated since I had become the principal instructor and had even produced a textbook to be used in the course.

4.20 p.m.

One of the younger students completes his pretest first shoulders his book bag, and hands the test to me as he hurries out of the stuffy classroom. I look over the familiar questions and his choices. A sampling of a few of the questions are shown below:

1. In industry, the mechanical engineering technician would be most likely occupied as

a. the designer of a bridge
b. a numerical control machine programmer
c. the chief technician at a radio station
d. a producer of parts on a milling machine

2. Select the library resource suggested in this course, that aids you in locating information on technically oriented subjects from the engineering fields.
a. Readers Guide to Periodical Literature
b. Applied Science and Technology Index
c. The Engineering Index
d. Business and Technical Periodical Index

3 The number four divided by one-half is
a. two
b. four
c. six
d. eight

4. The number 2.83×10^{-2}
a. is much greater than 0
b. is slightly greater than 0
c. is slightly less than 0
d. is much less than 0

5. If a box is 2 ft X 1 ft X 4 ft. how many cubic inches is its volume?
a. 96
b. 768
c. 1,152
d. 13,824

6. Some computer memory can be easily accessed and changed. What is the memory that cannot be easily accessed and changed, and is considered to be a permanent part of the central processing unit?
a. RAM
b. ROM
c. CPU
d. CRT

A calculator is not necessary for the pretest, since some students may not have purchased a calculator yet, and even if they have, I cannot be sure how well they will use it. During the course that follows their pretest, students are exposed to the material on the pretest (I even have them memorize the most commonly misspelled words in technical reports

The students are retested with similar questions at the end of the course. The post-test results (when compared with the pretest results) reveal whether or not the class was changed by the instruction. Over the eight years the pretest and post-test have been administered, student t- scores have shown the post-test group to be different at a confidence level of 99 % Typical pretest averages are 50% to 55% correct, and post-tests average over 90% The pretest/post-test results convince me of the continuing need for the course.

I see that the student who rushed to finish the test first has missed about half of the questions, questions I once considered far too easy for "my students." Instructing the Introductory Engineering Technology Course has taught me otherwise. I reflect on how important it is for all of us, knowledgeable enough to teach in the technologies, to realize we are quite different from most. Like cloistered monks we remain aloof when we should be objectively measuring what the

majority of our "client-students" need. Objective evaluations will allow us to confront the needs of our students of the 90s. Then we will know how far to reach out with a helping hand to pull them up the treacherously foreign technological foothills. They will then have a firmer footing as they attempt to conquer the remaining mountains.

4:30 p.m.

Another student brings up a pretest and I see right away that he has missed about 75% of the questions This person is ,no doubt, another representative of the *Neglected Majority*, a book written by Dale Parnell that so poignantly describes the 50% of U. S. high school students who are not prepared as well for the future as those completing a college prep or vocational curriculum

Dr Parnell has produced another, more recent book, *Dateline 2000*. In the book, he suggests that educators give greater attention "to continuity in learning at all levels." One operational recommendation IS to establish tech- prep programs in the high schools. He says the tech-prep programs should be, "aimed particularly at serving the two academic middle quartiles of a typical high school student body

Someday I hope to see something like the Introductory Engineering Technology Course I now instruct offered in the high schools to aspiring engineering technology students. This will allow us to improve articulation and to begin our coursework at a higher level, thus covering more material in our Engineering Technology programs.

5:00 p.m.

Later, I am trying to think through the optical mark reader's chattering away as it analyzes the pretest results. While awaiting the results, I recall the years spent developing the textbook for the course. Introduction to Engineering texts were available—our four-year engineering colleagues had recognized the need for an introductory course long before—but Introduction to Engineering Technology texts were not available, at least not the type of text that would work for the general - prep high school student described in Dr. Parnell's *Neglected Majority*. The text that resulted from that crucial advisory committee meeting is published by Macmillan publishing. It was prepared by assessing the needs of the students in early Introductory Engineering Technology classes and by responding to the ideas of the other technical faculty at our college. *Introduction to Engineering Technology* is in its third edition and used in more than fifty other colleges in the U.S. and abroad, convincing me that the needs of our small, Midwest college must be somewhat representative of needs worldwide.

5:30 p.m .

As I return to my office, I ask the same question asked of myself at the beginning of every Autumn Quarter, "Am I up to the task of trying to meet my students' needs this year?" On the way I run into the female student who was coughing so nervously during the pretest. It is at this point that I learn of her working as a "carnie" most of her life. She tells me of being a single parent, always wanting to do more with her life, how she is excited about returning to school and sure she will benefit from the class. She shares a lot of personal things with me. Throughout her nervous address, I sense those "great needs" I spoke of at the beginning of the pretest. I become confident that I can instruct another year, mainly because I desire to continue to meet the needs of people just like her. I know from pretest/post-test results that the Introductory Engineering Technology Course is vital to my college's engineering technology programs.

One thing is clear, the needs of our student-clients are great. Perhaps, with the right attitude and a sensible curriculum that begins where their needs are, we can better me[illegible]hose needs and provide an optimum future for our students and their communities.

This narrative was written some time ago to attempt to capture my feelings about my career as a technical instructor. It has been a long career, beginning in the early 1960s, when I was promoted to apprentice instructor in the field of Aerospace Technology. I still wonder, as did my "older" students in the narrative, "What am I doing here?" I Can only hope that some portion of my work has been worthwhile to someone.

One thing I would like to impress upon all technical instructors is the need for a well-defined curriculum. For it is our curriculum that is our major product. The curriculum should never become stagnant and should always be approved by advisory committee members experienced with our industries.

I also feel very strongly that all of us teaching in the technologies must offer source type of "big-picture" understanding to our students. The world is rapidly changing. Technicians trained in a single engineering discipline and not exposed to "what engineering technology is all about," will later - or sooner than later - in their, careers be at a serious disadvantage. Can we do any less for our future engineering technologists than to give them a solid broad-based beginning in a career that fills so much of their life?

I wish you success in your endeavors to contribute to a "great beginning" for aspiring engineering technicians. You are responsible for the high quality technical education that will provide needed technologists for tomorrow. You must do it—for the world needs qualified technical employees to fulfill the promise of "a good life for all."

Robert Pond
Engineering Instructor Emeritus
Central Ohio Technical College
Newark, OH 43055

When the Landlord Says Call 911: Nursing Program Contracts with Clinical Agencies

Larita Kaspar, Maureen A. Heuler, Mary Ellen Waithe

Introduction

In an effort to address the needs of the 21st century, many nursing programs are incorporating a gerontology course emphasizing wellness and the promotion of optimal functional abilities in the older adult. Nursing programs contract with assisted and independent living facilities to provide clinical experiences for students. The typical contract states that faculty and students will comply with agency protocol. A program requirement is CPR certification for all students prior to client contact. Historically, students have faced disciplinary action if they failed to implement CPR when indicated in any clinical setting. Landlord/agency protocol, however, is to call 911 in the event of a medical emergency. During one of these gerontology affiliations, an ethical dilemma developed.

On the second clinical day, a student, Melody Norris*, was interviewing her assigned resident, Mrs. Adams*, age 73, in her apartment. While recalling her early years, Mrs. Adams went to her bedroom to get her picture album. When she did not return in a few minutes, Melody went to the bedroom and found her slumped across the bed, unresponsive, with no respirations nor pulse.

Melody placed Mrs. Adams on the floor. After the first cycle of CPR, Melody ran into the hall and shouted for help. A fellow student responded, called 911 and assisted with CPR. When advanced life support arrived, Mrs. Adams was breathing and had an irregular pulse. She was transported to the hospital, stabilized, and admitted to the coronary unit. A chest x-ray revealed two rib fractures. Two days later, she suffered another massive myocardial infarction and expired.

Mrs. Adams suffered pain as a result of her rib fractures. She experienced anxiety for two days related to the fear of impending death. After 48 hours of misery, she died. Additionally, medical bills were incurred.

*ALL names are fictional.

The consequences of Melody's intervention could have been avoided, had she followed agency policy to call 911. Melody was aware that the elderly are more likely to incur injury from CPR due to changes that occur with aging. Further, she knew the statistics cited in recent literature related to CPR for the elderly are conflicting and often dependent upon multiple variables. For example, many studies have taken place in acute geriatric medical units, nursing homes, and rehabilitation centers, where there is an already compromised population. These studies reflect a poor outcome. On the other hand, a study of over 2700 out-of-hospital cardiac arrest victims (Van Hoeyweghen et al., 1992) concluded that there was not a significant difference in a two-week survival rate between age groups. The study further concluded that initiating CPR should not be based on age, but on other predictive factors.

Another study of elderly arrest victims suggested that survival rate is impacted by the nature of the electrophysiological insult (Tresch, 1991) concluding that in some specific groups of elderly, success rate for CPR is rather high. Note also that in another study of the frail elderly, the majority chose CPR despite overwhelming odds (Torian, 1992).

Melody's only concern when initiating CPR was to maintain life. She was clearly aware that chest compressions could fracture ribs and puncture lungs, particularly in a 73-year-old woman. At the same time, she was confident in her knowledge of appropriate technique which could minimize complications. She recognized that immediate intervention was necessary to prevent brain damage. It was her belief that the risk of complications was secondary when weighed against the risk to Mrs. Adams' life. Melody intended the good result. She knew that if time lapsed, CPR could result in greater harm than good, because survival rates are correlated to the interval between the arrest and the initiation of CPR. In what ensues, we will argue that the best possible action at the time was to initiate CPR.

Our argument follows two distinct approaches in ethical analysis: first, the weighing of competing principles that are relevant to this case situation; second, an exploration of the ethical values of nursing and their relevance in this case.

Weighing Competing Principles

In urging other professionals to follow a particular course of action, or simply

in trying to sort out which course of action is ethically most defensible, it is common to appeal to widely recognized moral or ethical principles. However, identifying which principles are relevant in a given case situation is not sufficient, especially when several principles conflict with each other. When this occurs, we have a true moral dilemma. We must resolve the dilemma by finding reasons to consider one principle to be more significant than another. In this situation, it is clear that at least the following principles are relevant:

1. Respect another's right to life.
2. Act beneficently while respecting autonomy.
3. Comply with professional codes of practice and conduct, and with professional standards of practice in the community.

In this case situation, these principles all conflict with another important principle:

4. Honor the terms of contracts to which you are a party.

Although we came to the conclusion that Melody and other gerontology nurses in similar situations should not honor all of the terms of the contract to which principle four refers in this case, we want to stress that this does not settle the matter in favor of unilateral abrogation of the terms of this or any other contract.

Principle One - Respect Life: the dismal 14% survival-to-discharge rate cited by Tomlinson might suggest that there was insufficient reason to perform CPR on Mrs. Adams: by overwhelming odds she was likely to perish. As ethicists we want to ask, what rule should govern nursing decisions in such situations? In an emergency situation, with no time to review the client's history or to confirm diagnosis, the rule (that CPR should not be performed) would have ludicrous outcomes for people who suffer a cardiac arrest. To adopt such a "rule," we must be willing to allow 14 people to die unnecessarily in order to avoid the physical harm and trauma to those 86 clients whom CPR could not help; however, we have no way of knowing which group any given client will fall into. Complying with contracts will save 100 people possible injury while denying the right to life of 14 others.

We must resist the temptation to cloud this issue with discussions of the quality of life Mrs. Adams might enjoy following Melody's intervention. It is conceivable that, under different circumstances, her prognosis for survival would have been zero, or the quality of that survival so unbearably poor from her perspective, that intervention would not be morally defensible. As we have described this case, Mrs. Adams is an independently living adult with no known serious illnesses. Although we might consider a different response to her MI in the event that pre-existing medical conditions seriously compromised her quality of life, such is not the case here.

Principle Two - Act Beneficently by Respecting Autonomy: The two principles, beneficence and autonomy, perfectly coincide in this case, although it is not that uncommon that they conflict. Generally speaking, a competent person is the best identifier of what the good is for themselves. To act autonomously is to identify one's good and act to obtain what one conceives to be good for oneself. When we act on behalf of another person who is incompetent, we must identify what acts would be beneficent acts toward that person. In doing so, we must be guided by (a) general knowledge of what most people consider to be good for them, as well as by (b) lack of knowledge that the person for whom we act had different views from most people. Prior to her arrest, we must assume that Mrs. Adams was competent since there was no evidence to the contrary. Upon her arrest she became, at least temporarily, incompetent.

It could be argued that Mrs. Adams gave consent for emergency intervention when she signed an agreement "for the purpose of providing informed consent" to be interviewed by a student nurse about "mental and physical health and functioning." This agreement form further stated that student nurses were participating in a clinical experience for the purpose of learning about healthy aging. While the form did not address emergency interventions, nothing in Mrs. Adams' behavior suggested that she would decline emergency care needed to save her life. That is, Melody Norris had every reason to believe that Mrs. Adams expected the Principle of Respect for Life to be respected in her own case. Therefore, it seems reasonable to assume that Mrs. Adams expected to receive CPR if the need arose while with the student nurse. However, the fact remains that the emergency was not anticipated and her consent to emergency treatment was never sought. That she might have consented had she been asked to do so does not moot the fact that she did not. (That I might have consented to marry Prince Charming had he asked me does not now justify his taking special liberties with me when I pass out.) According to Pozgar (1987), "implied consent exists when immediate action is required to save a client's life or to prevent permanent impairment of the client's health." But is this true in the present case? When there is a life-threatening emergency and actual consent is not possible, we must invoke either the "best interests" standard, the "reasonable man" standard, or the "substituted judgment" standard for consent. Without explaining these standards, and without working out the details of the application of each to the present case, let us mention instead that under all of these standards, the outcome is the same. Emergency, life-sustaining treatment should be given because we lack any evidence that Mrs. Adams would have wanted to die, or that it is in her best interest to die, or that a reasonable person similarly situated would have refused treatment. By acting in a way consistent with consent already given by the client and in a way intended to preserve life and therefore preserve for Mrs. Adams the greatest possible autonomy, Melody both acted beneficently towards her and respected her autonomy.

By acting consistently with the standards of the profession, Melody's actions benefit the reputation of the school. (Can you imagine the damage that could have been done to that reputation had it been reported in the press that "despite the fact that students are skilled in CPR, the College will not support a student who performs CPR in an attempt to save a client's life"?) Similarly, with regard to the reputation of the corporate landlord, compliance with contract would not have been in the best interests of the client, the College, or the outside agency. That is, withholding CPR would violate the Principle of Beneficence with respect to other interested parties (professional, school, landlord, etc.)

Principle Three - Comply with Professional Code of Practice and Conduct: How is it that a nurse carries out the task of respecting Mrs. Adams' right to life? Had the student been unprepared for this emergency, then compliance with the agency protocol incorporated into the contract would have been the appropriate action by which to evidence respect for Mrs. Adams' right to lite. Melody, however, was deliberately prepared by the school for just such an occurrence: successful completion of a CPR course was a prerequisite for the gerontology clinical! Further, Mrs. Adams was clearly in need of immediate care and Melody was the only person present and qualified to provide it. To fail to render care would be an apparent violation of the Professional Code requirements by which Melody was bound. Because this incident occurred in a community where prompt transfer to an ICU was possible, and because Melody knew of no prior history that would compromise her client's successful resuscitation, it appears that she was ethically

required to provide care. Compliance with contracts that require nurses, on the one hand, to provide nursing care that meets the standards of the profession in general, but on the other hand, to violate those very standards regarding emergency care, *is inconsistent*.

The nursing profession has a *Code of Ethics* that establishes formal standards of professional behavior. The Code contains a set of ethical principles that nurses must consider when determining proper conduct. The principles of the code provide moral guidelines intended to result in good and to minimize harm. Affirming the worth and dignity of each human being is a basic value found in the code. The code also mandates responsibility and accountability for individual nursing judgments and competence in nursing interventions. In this case, an immediate intervention was necessary to preserve life. Even though this intervention failed to preserve life for an extended period of time, this is not evidence that the intervention was wrong from the beginning.

The norms of the profession as well as the *Code of Ethics* for nurses hold the nurse accountable to self, the client, the profession, the employing institution, and society (Potter, 1994). The duties inherent in professional accountability include "making judgments based on fact, ...maintaining ethical conduct in the care of all clients in all settings" (Potter, 1994). Nurses guide their actions so that they are consistent with the principles of autonomy, beneficence, justice and nonmaleficence when caring for clients. As we have seen from our discussion of Principle Two, implied consent may compel the nurse to act without the client's actual consent, if the client's welfare is at risk. Mrs. Adams had a right to expect emergency intervention. Further, it seems Melody had a duty to intervene.

Principle Four - Honor Your Contracts: Clearly, there are circumstances in which we are not morally required to uphold the principle of Respect for Life, for example, in cases of self-defense. Although we are never morally free to violate the terms of a contract at will, there may be overriding moral warrants for sometimes doing so. It can be argued, for example, that preventable unintentional loss of life was never an outcome contemplated by the contracting agencies. Once those unforeseeable consequences become foreseen, there are good faith reasons for renegotiating modifications to the contract that take those consequences into account. Likewise, there are circumstances in which neither professional codes nor the standards of nursing practice within the community provide clear guidelines for professional action. However, when they do, and when in addition they conflict with the requirements of a contract to which one is a party, it should be remembered that codes and standards exemplify the highest moral standards of a profession. Honoring a contract that requires one to violate those codes and standards places one outside the moral norms of the profession. Such decisions should not be taken lightly. Lastly, there is a logical inconsistency within the contract itself: it requires faculty and students to call 911 in an emergency instead of providing care which they are qualified to provide. We have argued above that complying with that contractual provision violates the principles of nursing. Therefore, the contractual relationship itself entails an inconsistency. This, in part, justifies initial noncompliance followed by renegotiation of that particular term of the contract.

Exemplifying the Values of the Profession

The moral values of a profession give a profession its special moral and social status. A virtuous nurse or a "good" nurse is one whose nursing practice exemplifies these professional values. Wisdom and diligence are two such values of nursing. Caring is another. Current nursing literature has examined the virtue of

caring in the nurse-client relationship. In doing so, the virtue of caring is more fully recognized as the core element in client care. Following Benner and Wrubel (1989), we may say that the virtue of caring is exemplified through many nursing actions. For example, caring means that persons, events, projects and things matter. A nurse is caring when she fuses thought and feeling with action, or knowing with being. Caring nursing practices include knowing, being with, doing for, enabling, involvement with, and the ability to presence oneself with a client in a way that acknowledges shared humanity. Leininger (1984) further states that "caring is the essence and the central, unifying and dominant domain to characterize nursing." Nurses, through the socialization process to the profession of nursing, come to internalize the value of caring into their very being so that this value is reflected in all nursing behavior thereby rendering that behavior virtuous or morally good. However, the practice of caring for another must itself be limited by relevant moral principles. For example, a parent's demonstration of "care" for a child cannot be expressed through violent physical discipline. The virtue of caring is limited not only by benevolent concern for the child's welfare, but also by respect for the child's developing autonomy, and respect for life.

The moral principles respecting life, acting beneficently with respect for client autonomy, and complying with nursing's professional code of conduct are components of the virtue of caring. By acting consistently with these principles, Melody Norris acted virtuously. She cared about and cared for Mrs. Adams.

Conclusion

An ethical policy of the educational institution related to agency contracts would protect these professional standards of practice in part by anticipating situations, such as the present case, in which the moral norms of the profession would conflict with contractual obligations. In the present situation, Mrs. Adams clearly needed Melody to care about her wishes, her very life! Mrs. Adams needed an advocate, a skilled and knowledgeable practitioner to assist her to restore her vital functions. Mrs. Adams needed supportive, compassionate and protective care. The primary concern of the student was the well-being of the client. Cooper (1988) believes that protection and the enhancement of human dignity are the ultimate outcomes of the virtue of caring. The student indeed acted to that particular end: the protection and enhancement of human dignity. Because caring is such a central moral value in the practice of nursing, it becomes essential that any educational institution offering a nursing program make provision to ensure that caring be demonstrated by students, faculty and by protocols in clinical settings.

Nursing is a practice profession, and students learn best in the clinical setting where theory is applied and role emulation occurs. Clinical agency protocols should not impede this very essential part of the learning process by requiring students to violate the principles and values of the profession, thereby changing virtue into vice.

Larita N. Kaspar, M.S.N., R.N.
Associate Professor, Nursing
Lorain County Community College
Elyria, Ohio 44035

Maureen A. Heuler, M.S.N., R.N.
Assistant Professor, Nursing
Lorain County Community College
Elyria, Ohio 44035

Mary Ellen Waithe, Ph.D. Professor
Director of Advanced Studies in Bioethics
Cleveland State University
Cleveland, Ohio 44115

AWARDED ARTICLES

This year the Ohio Association of Two-Year College Journal *celebrates its twentieth year. To help commemorate this event and to honor all of you who contributed, the OATYC Executive Board and OATYC Journal Editorial Board formed a committee to select the outstanding writing from among the printed articles of the last ten years. The committee met during the summer and selected the following two articles: "Whips, Chairs, and other Motivational Teaching Tools," by Ron Luce of Hocking College and "Implementing TQM in Two-Year Colleges," by George Kreps of the The Ohio State University, the Agricultural Technical Institute. Hats off to Ron Luce and George Kreps.*

Whips, Chairs, and Other Motivational Teaching Tools

Ron Luce

I felt like I was entering the lion's cage without a whip when a department director asked me to make a brief presentation to her faculty members during "Faculty Development Day" activities recently. I knew that these teachers had been thrown into the center ring of faculty development against their will. I knew some of them professionally and had heard the roars of negativity toward the idea of change even though some were receiving negative feedback in their student and administrative evaluations. Yet, somehow, I was supposed to make a difference. Using my limited background in training new instructors, I was supposed to try to build some enthusiasm in this group of overworked and tired "old" teachers—a tall order at best, particularly since I had all of an hour to perform this miracle. I knew the realities. I knew I couldn't change behaviors dramatically in such a short period of time. But I also knew I had to leave the session believing I had made them sit up and take notice of their students' needs.

When I walked in, these technical instructors were sitting at desks that had been arranged in a box shape to resemble a conference setting. They were obviously planning to suffer out the hour they were assigned to endure, arms folded over their chests, daring me—an English teacher recently assigned the title of "teacher educator"—to interest them in anything. As a way of beginning, I faced them and tried to make a clever welcoming comment (that was ignored). After a few brief, stumbling introductory comments, and as a way of gaining my composure and getting past their deadly silence, I asked that they jot down on a piece of paper characteristics of the ideal student. (They did this somewhat reluctantly.) I went to the blackboard and waited. When a minute or two had passed, I asked them to share what they had written. After a long silence someone offered a comment, "reads the book"; then someone else made another contribution. As I cajoled, they began loosening up and responding even somewhat enthusiastically, I wanted to believe. They were developing a description of a student who would be an attentive, actively engaged thinker, someone who would go beyond the basic requirements of assignments and who would challenge his or her potential by exploring written materials and by asking good questions, someone who would ask for extra learning experiences. They seemed to like the image they were projecting.

As I stood back and let them brainstorm, they began to comment more and

more and to discuss their own perceptions, clarifying, and questioning one another. They painted a picture of their desire to teach students who learn because learning is worth doing and a desire to avoid teaching those who attend their classes only because the learning will supposedly create a "high paying" job with acceptable benefits. When they apparently had said all that they wished, I stated that there may be a thousand reasons why students do not live up to the ideal image and asked them to name a few of the reasons. They mentioned "bad" high schools, "bad" families, and society as a whole, just to name a few. I asked them how students learn to be "good" students as "good" was defined by the group. No one was able to come up with much more than a few jokes about kicking parents' butts . Then I stated that there are ways that they might begin moving students toward the ideal goal, but change would require a willingness to change themselves and to risk some new approaches to their classrooms. Then the collective sighs began and the comments about the "reality" began slipping into their discussion. As I felt what was moving toward cynicism about teaching within the group, I knew I would have to get going and pull them away from the "bitch session" format they were moving toward. The discussion of their students had gone as far as it would go for a while, so I moved on to another topic.

I asked the individuals in the session to write down the best experience they ever had as a student learning new material and the worst experience they ever had. (...the groans and grunts began in earnest, but they were good natured groans and grunts.) I had to clarify that I was talking about academic/technical education, since three or four of the men in the group began to make some jokes about "learning experiences" that were potentially interesting but clearly outside the goals of the session (jokes better left for the locker room). These little jokes provided the first moments of real comfort between the group and me, and I was confident that we were moving toward a possibility of something happening. When they finished jotting down their recollections, we shared several of them and listed characteristics of the good experience and bad experience on the board. In a short period of time we established a list which indicated that good educational experiences for them consisted of situations where they were allowed to engage the material to be learned through hands-on experience, where the teacher obviously cared about them and respected them, where they got to ask and answer questions, and where they felt they had impact on their own development.

The list for the "worst experiences" indicated that classes involving largely lecture presentation were usually deadly. Classes where teachers obviously did not respect students, where they were condescending, aloof, unprepared, or ill-mannered were designated as "worthless" and conjured up images of great hatred and frustration in the participants even though it had been, in some cases, twenty years and more since the incidents they shared with the group occurred.

Eventually, I summarized the discussion by stating that, apparently, students have been taught largely that "good" studenting means to sit down, be quiet, and passively absorb information being pumped into their brains by the teachers who are "really" responsible for their learning; therefore, they might not come to terms with any responsibility for themselves as learners because teachers have rarely encouraged such introspection; we too have accepted the teacher-as-controller-of-learning model we learned during our own educations.

These teachers had already demonstrated, as could be seen through their comments, that the methods many teachers use are not in harmony with what they know to be good learning experiences. I tried to make the point that change

hinges on new attitudes about responsibility—responsibility for teaching and learning. "In the old model, the teacher is responsible for imposing knowledge; in the new model, the teacher steps out of the way and *lets the student learn!*"

To demonstrate, I offered the following example based on materials I use in my English classroom. "Suppose you were going to teach a student how to write an effective memo. You could stand up in front of the class behind your lectern and state the names of the major parts of the memo, discuss proper format, explain appropriate language, describe a writer's attitude, and explain the reasons why neatness counts, and your students might drown you out with their snores. Or you could show a memo exercise on an overhead projector, uncovering the memo body portion line by line and asking them to react,to it and then asking them to explain their reactions." (I placed an example on the overhead—a particularly poorly written, confrontational example I had chosen for its ability to evoke reaction.)

I uncovered the memo down through the first line of the first paragraph and asked them to respond as the intended reader might respond, to talk about how the language makes them feel and what they would want to say to the writer if she were present while they read the memo. Then, I simply let them respond as I proceeded to uncover it line by line. By the time the teachers had finished reading the first paragraph, they were saying things like, "I'd punch this person in the nose!" By the time they finished the memo, they were laughing at the outrageousness of the language and the feelings the language had evoked in them. I explained, "You might simply let the students react—and they would react as you have—without adding your own view. Then you might ask questions like, 'How do you feel about it?' 'Why?' What are the implications for the workplace?' 'How might this affect you personally if you were the intended reader?' 'How might it affect the department you work in?' 'How might it affect the company as a whole?' 'How do you imagine the problems will be solved?' (These are questions I would ask you to address if we had time here today.) While doing this exercise and letting students talk, you will quickly come to terms with the fact that they are quite capable of seeing and identifying what makes for poor communication. When they are asked why it is poor, they will tell you because the language is 'nasty' and the writer of the memo comes across as an unreasonable person. As they figure out what they don't like about the memo, students are determining what an effective memo *should be.*"

The group gave me their non-verbal agreement. They were following my presentation, accepting it in principle.

Once the objective of developing a student-centered classroom had been identified, I presented some considerations for improving their chances for success with the approach I was advocating. For the presentation's sake I lumped these factors under four major categories: "appropriate physical environment," "appropriate mental environment," "adequate student preparation," and "adequate instructor preparation."

Appropriate physical environment involves issues of comfort created by such things as room color, lighting, arrangement of furniture, type of furniture, and placement of posters or paintings. This may seem a mundane concern, but it is often the first place students frame opinions about the class, the instructor, their fellow students, and the institution as a whole. For example, if the students arranged in neat little rows in dark, dingy, little rooms, hiding behind the heads of the people in front of them, they buy into the role of the passive recipient of knowledge more readily than students who work in the open, at discussion tables, looking each other in the eye, confronting one another's ideas face to face,

or the students sitting in a circle where each face can be seen and reacted to by the entire class.

Appropriate mental environment involves attitude, comfort with the instructor and the material to be dealt with. An appropriate mental attitude is built on the idea that the instructor respects the student as a person who brings a body of experience to the classroom, experience that is worth recognition and sharing (much like what these instructors were doing this day). It involves an attitude that mistakes are part of learning and should not be discouraged. The instructor must make the students feel they will have adequate time to frame responses to new concepts and questions that force them to rethink their existing ideas.

Adequate student preparation deals with the fact that students do not like to be forced to speak from a base of ignorance. Assignments must serve to enhance their knowledge base before the instructor asks them to perform. And when students deal with new concepts, the instructor must allow them to draw upon their own familiar experiences in order to form a base to which new concepts can be compared.

Adequate instructor preparation involves an awareness and appreciation of all the previously mentioned factors. The instructor in a student-centered classroom must have a clear sense of purpose and direction, as well as a strong base of knowledge in the subject matter. The instructor must come to class with numerous questions and activities designed to evoke thought and designed to help students uncover learning rather than memorize facts. The student-centered classroom hinges on active involvement of students in the process of answering "How? and "Why? rather than answers to "Who?" "What?," "When?," and "Where?"—questions that beg the simple one-word response or questions that serve the quiz mode better than the student-generated analysis and synthesis modes that these instructors agreed teachers want.

I tried to make it clear that there are numerous variations on this approach. And question/answer/discussion modes are not the only means for presenting information in a student-centered classroom. "What is important is that students have the opportunity to *discover* and *absorb* the material rather than memorize the data. When they uncover the material for themselves, they are much more likely to value the experience and use what they have learned because it is now theirs; it is not something borrowed from the teacher! The student-centered classroom means significant change for teachers who have worked from the perspective of the teacher-centered classroom. It requires risk, and it requires courage. But it is change well worth the efforts.

As time was growing short, I tried to make the point that *letting* students learn in the classroom is not easy, and it takes a very long time to develop. It requires careful attention to many details, such as those previously stated under the four categories above, and it requires tremendous risks and flexibility. ("You can't plan someone's response like you can plan a punch line to a lecture; and you can't contain a flowing discussion in precisely ten minutes like you can hold a portion of a lecture to a limited number of minutes, depending upon the words chosen and the speed with which you deliver the information.") As a result, the teacher who uses the approach—and I hoped these participants would be among those who would try—has to have numerous options ready in case one fails and must be prepared to face unknowns at every turn in the classroom; this includes occasional failure. I knew I was asking a great deal without having enough time to suggest much that was concrete about what they might do to change. They had real problems: not enough time to prepare, not enough

BEST COPY AVAILABLE

comfort with modes of presentation other than lecture, not enough experiences in preparing students to live up to their idealized vision of what students might be. They, like too many teachers (myself included), had not been given training in how to teach; they had been prepared to be knowledgeable about their fields and were assumed to be able to figure out how to do this "other" thing. They lacked a foundation that I was asking them to build under an already existing structure.

I was not going to give them that foundation in an hour, and it was foolish of me to hope that I might do more than make them become actively involved in and mildly uncomfortable with whatever they were presently thinking and doing about themselves as teachers. And they *had* become involved in the hour. They had articulated that they knew what it meant to them to be students and to struggle with learning; they had articulated what good teaching and learning should be. They had articulated that good teaching and learning revolved around the needs of the student, not the teacher. *They* had articulated all this with minimal help from me. I had done all I could do toward creating the discomfort that creates the potential for change: reaction followed by thought toward *productive action*.

Ron Luce
General Studies
Hocking Technical College
Nelsonville, OH 45764

Implementing TQM in Two-Year Colleges

George Kreps

Total Quality Management offers both a process and a system to produce dynamic changes in the organization and operations of two-year colleges in the areas of academics, service and administration.

Two-year colleges face challenges similar to those facing manufacturing, businesses and service industries. We are reminded of these changes in the news from the business pages of our newspapers about down-sizing, restructuring, early retirements, quality circles and total quality management.

Two-year colleges have been in the vanguard in adapting to changes in society and TQM can be an effective way to meet these challenges. The initial incentive for using TQM in two-year colleges came from business and industry. Fox Valley Technical College and Delaware County Community College are two examples where the colleges provided TQM training programs for industry and then began the process of using TQM for their own operations. The regional accreditation associations are asking for increased assessment of student achievement and the incorporation of the assessment results into academic planning (Ewell, "Assessment and TQM: In Search of Convergence," 1991: 3952). TQM enhances the assessment process in colleges. The demographic changes found in the age, martial status and races of people attending colleges today are forcing higher eduction to provide more and varied services. Changes in the type of jobs and the need for more post high school training place increased demands on the colleges, while at the same time there are decreased or static

levels of public funding. All these combine to force more colleges to find better ways to serve people with the same level of resources as before.

William E. Hull in "The Quality Quest in Academia" (1992:225-240) gives this description of the situation facing colleges and a means to successfully meet these changes. "Academic life in America today exists in a world with too many schools and too few students, too many fixed costs and too few discretionary dollars, too many competitors and too few supporters. In such a world, survival does belong to the fittest, which will be those institutions imbued with a passion for quality that extends to every member of the community,faculty included. Some may prefer a more sedate, less demanding academic lifestyle, but this will no longer fill our classrooms, build our buildings, and pay our salaries. Accepting a quality quest means, first and foremost, a willingness—yea, an eagerness! - to be truly competitive in the educational arena." TQM is a way for our colleges to continue their quest for quality service in spite of increased demands for service and static funding sources.

This article will develop several definitions of TQM for higher education. It then examines briefly TQM Programs at Fox Valley Technical College and Delaware County Community College, a plan for a five-year institutional implementation of TQM, a summary, and a brief list of TQM resources.

TQM can be defined in various ways. Jablonski, (1992) suggests that TQM fundamentals have been around awhile and he traces them to J.C. Penny's, "Penny Idea" in 1913. There were seven tenants on which J.C. Penny company was organized. They illustrate the fact that TQM has been used in US business under other names. The seven J.C. Penny tenants are:

1. To serve the public, as nearly as we can to its complete satisfaction.
2. To expect for the service we render a fair remuneration and not all the profit the traffic will bear.
3. To do all in our power to pack the customer's dollar full of value,quality, and satisfaction.
4. To continue to train ourselves and our associates so that the services we give will be more and more intelligently performed.
5. To improve constantly the human factor in our business.
6. To reward men and women in our organization through participation in what the business produces.
7. To test our every policy, method, and act in this way: "Does it square with what is just and right?"

Jablonski (1992:21) gives this current definition of *Total Quality Management* as "a cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve quality and productivity using teams."

Sherr and Teeter editors of *Total Quality Management in Higher Education*, Jossey Press, 1991, assembled articles from a group of scholars and administrators on the subject of TQM in higher education. In their book, Edwin Coete, Oregon State University says that total quality management is defined as a combination of quality control theory, systems, tools and organizational models developed over the last to years both in the United States and Japan by W. Edwards Deming, I.M. Juran, Phillip Crosby and others. TQM is a structured system for creating organization-wide participation in planning and implementing a continuous improvement process. That process should produce results that exceed the expectations of the customer. TQM is built on the assumption that 90 percent of problems are process problems, not employee problems.

A second version of TQM in higher education is provided by William Anderson, OSU/ATI, in a memo to faculty and staff. He says that TQM is a method of operation that focuses on customer satisfaction. TQM attempts to exceed the expectations of the customers, both external customers (prospective students, employers, the local community) and internal customers (current students, all OSU/ATI employees who serve each other in one way or another). TQM is an empowerment process, where ideas of all members of the campus community are valued, teams of affected individuals address problems, propose solutions and decision-making is delegated to those most clearly associated with everyday processes. TQM guarantees that an organization will listen to its customers, identify customer needs and incorporates those needs into every phase of its operations.

A third version of TQM comes from a statement by Stephen Uzelac in *Zen Leadership: The Human Side of Total Quality Team Management*, 1993. He says that TQM is based in part on assumptions from Maslow's theory of motivation and McGregor's Theory X and Theory Y of management. He says that the mission of quality improvement teams is to give people influence and empowerment over their work. The training process for TQM is based upon a philosophy which recognizes individual people as total human beings who desire to participate in decisions affecting their quality of life. McGregor presents an argument that most management actions flow directly from whatever theory of human behavior a manager holds. This theory holds that whatever a manager believes about people will control the manager's actions.

Accordingly, a manager's beliefs that reflect traditional assumptions or Theory X will result in a leadership style that is autocratic and that the manager's role is to control people. On the other hand when a managers beliefs reflect Theory Y, the leadership will tend towards being supportive and the role will be help employees release their skills towards common objectives He describes the differences in management practices and employee behavior in the two models.

TQM is a process to help an organization make the transfer from Theory X

THEORY X - TRADITIONAL ASSUMPTIONS		
RESULTS	MANAGEMENT PRACTICES	EMPLOYEE BEHAVIOR
Based on:	POWER	OBEY
	AUTHORITY	DEPENDENCY
	CONTROL	SEPARATE AGENDA
Trust:	LOW	LOW
Cooperation:	PASSIVE	PASSIVE

THEORY Y - MODERN ASSUMPTIONS		
RESULTS	MANAGEMENT PRACTICES	EMPLOYEE BEHAVIOR
Based on:	COMMITMENT	OWNERSHIP
	SUPPORT	SELF-DIRECTION
	ZEN LEADERSHIP	RESPONSIBLE
	PARTNERSHIP	TEAM PLAYER
	EMPOWERMENT	ENTHUSIASTIC
	MISSION	COMMON AGENDA
Trust:	HIGH	HIGH
Cooperative:	ACTIVE	ACTIVE

assumptions about human behavior to Theory Y assumptions about human behavior.TQM provides new patterns of administration and decision-making which enable employees to take more active ownership in the mission and programs of the institution.

Don Butte of Goodyear, in conversations with the author, says that TQM should really to titled "TQC" or total quality culture. He says this for two reasons. The first is that TQM is really about changing the culture of an organization.Secondly, it will therefore require time, effort an commitment by members at all levels of the organization. Theory X and Theory Y assumptions call attention to Butto's idea that TQM is about culture change whether it is in corporations or in higher education. Another way to describe the mission o TQM is that it is changing the paradigm of organizational structure and behavior from the traditional model to the modern one.

MODEL FOR THE IMPLEMENTATION OF A TOTAL QUALITY PROGRAM IN A TWO-YEAR COLLEGE

YEAR ONE	* Explore total quality management for the institution * Train administrators, faculty, staff, board members in Phase One Total Quality Management * Develop a vision statement * Appoint a TQM coordinator * Establish a pilot project team or teams
YEAR TWO	* Train faculty and staff in TQM in all areas * Train staff in all operational areas * Define the needs of customers, i.e., students, faculty, staff, administrators, general public * Develop a step-by-step planning process for all teams
YEAR THREE	* Provide teambuilding training unit by unit * Develop work unit problem solving activities * Recognition and celebration of team results * Implementation of TQM in the classroom
YEAR FOUR	* Provide for external audit of quality process * Phase Two training for faculty, staff and administrators * Use of TQM in academic division management * Recognition and celebration of team results
YEAR FIVE	* Use of TQM in administrative council * Training for self- managing groups * Develop a vision statement for the next five years * Recognition and celebration of team results

Fox Valley Technical College and Delaware County Community College have been involved with both teaching TQM courses and incorporating TQM into their administrative, academic and service systems since 1986. They have published articles and books about their TQM efforts and conduct training seminars on TQM in higher education. Sherr and Teeter (1991:91) list twenty five institutions of which the following are two-year institutions: Delaware County Community College, Media, PA.; Fox Valley Technical College, Appleton, WI;

Hawkeye Institute of Technology, Waterloo, IA; Jackson Community College, Jackson, MI; Lamar Community College, Lamar, CO; Palm Beach Community College, Lake Worth, FL; St. Augustine Technical Center, St. Augustine, FL. The author has heard that Columbus State Community College, Columbus, OH, is using TQM.

Spanbauer in *A Quality System for Education*, 1992, has indicated a model based of FVTC'S experience. The model can be used for most institutions of higher education. It is similar to the one listed by Coate at Oregon State University

Coate at Oregon State University (1991:27-39) divides the total quality management process into two parts. First is the TQM Strategic Planning phase and the second is the TQM Team Process. Phase one involves a seven stage process. Phase two is a ten-step process used by each team as it studies problems and implements solutions.

The use of TQM has produced significant results in colleges. For example, Deleware County Community College (DCCC) (*Total Quality Management in Higher Education. 1991:13-25*) used the TQM process with a team to reduce the number of lost telephone calls coming into their admissions office from 19% to 0 %,. A DCCC faculty chairperson has reorganized her secretarial staff into a team with the result that they handle a larger volume of work with fewer mistakes with the workload from 90 instructors.

Coate (*Total Quality Management in Higher Education. 1991: 27-38*) further cites the use of TQM by the physical plant department to reduce the time in the remodeling process by 10% and then by another 23%. He also observed that a nonmeasurable change occurred in the quality of the remodeling jobs. The employees were doing a better job and their morale increased.

Harris and Baggett in *Quality Quest in the Academic Process(1992)* provides a

TQM STRATEGIC PLANNING PROCESS	TQM TEAM PROCESS
Review University Strategic Plan	– Interview customers
Review unit, division, Dept. mission, goals, etc.	– Select issue and develop performance measures
Identify all customers (do surveys, etc.)	– Diagram the process
	– Diagram causes and effects
Identify unit vision and breakthrough items (or super goals)	– Collect and analyze data on causes – Develop solutions
Identify critical processes for unit, division, department and discuss evaluation criteria	– Benchmark
	– Select and implement solutions
Train team leaders, facilitators Form teams around each critical	– Plan-Act-Do-Check process – Measure results and refine measures
	– TEAM SELECTS THE NEXT ISSUE

series of articles by Samford University faculty and administrators on ways they have implemented TQM in their classrooms and in their academic departments.

OSU/ATI has formed a team using TQM to examine the retention rate for students and make recommendations to improve the rate. The team studied the problem, conducted surveys and prepared its report to the Director. This report proposes specific ways to increase the retention rate by 1% per year. Team members will have the opportunity to implement their recommendations.

These examples are only the tip of the iceberg in terms of TQM being utilized in institutions of higher education. However, they do illustrate that TQM is working and producing results.

The author's own experience in advising consulting and teaching TQM for the past three year supports the idea that TQM is effective for improving communication in the classroom, and that it is useful for improving the administrative process in two-year colleges and that there is demand from business and industry for training programs in TQM. The author has been teaching TQM classes in local industries. He has observed the TQM process at Honda Auto Manufacturing both in Ohio and Japan and at Goodyear in Akron. He has used TQM in his own social science classes and is currently serving as a facilitator for an OSU / ATI Team to improve the retention rate of students at the Institute.

TQM offers a process and a system to enable two-year colleges to better serve their customers, i.e., students, business and industry and the communities, while at the same time empowering faculty and staff to become more involved in defining problems and implementing decisions that affect the quality of academic programs. The advantages of a TQM system for two-year colleges are both quantitative and qualitative. The college becomes proactive rather than reactive. Financially, the college can improve services without significantly increasing costs. These improvements enable the college to be more competitive in our society by providing more services and improved services.

In summary these are points to consider in the implementation of TQM in two-year colleges:

1. Two-year colleges have been successfully implementing TQM in their administration, their academic programs and in continuing education and can serve as models. Two examples are Fox Valley Technical College, Appleton, WI; and Delaware County Community College, Media, PA.

2. TQM is useful to colleges as they comply with the mandate from the North Central Association and other accrediting associations to implement annual programs of institutional effectiveness and student assessment. (Ewell: 1991: 39-52, "Assessment and TQM: In Search of Convergence.")

3. Total Quality Management has been defined as Jablonski (1992) and Coate (1991) as a combination of quality control theory, systems, tools and organizational models developed over the past 40 years both in the United States and Japan by Deming, Juran, Crosby and others. . . it is a structured system for creating organizational-wide participation in planning and implementing a continuous improvement process. That process should produce results that exceed the expectations of the customers. TQM is built on the assumption that 90 percent of work problems are process problems, not employee problem.

4. TQM theory and practice is based in part on assumptions derived from Maslow's Theory of Motivation and Douglas McGregor's Theory X and Theory Y.

5. Effective implementation of TQM in a two-year college will require at least five years. Staff and faculty at Delaware County Community College indicate there still are many opportunities for additional implementation about the first five year plan was implemented.
6. Effective implementation of TQM needs the full support of the college administration during the initial five-year period and the patience to wait for results.
7. It is necessary to spend time and funds on training for administrators, faculty and staff in the use of TQM (Spanbauer: 1992: 21-22).
8. Costs include a coordinator or facilitator for TQM, contracting for initial training and providing time for faculty and staff to attend training.
9. **Helpful TQM Resources include:**

Memory Jogger for Education: A pocket Guide of Tools for Continuous Improvement in Schools. This pocket sized booklet of 88 pages gives a basic description of TQM, Team Building and Problem Solving Techniques. These include flowcharts, check sheet, brainstorming, nominal group technique, Pareto Charts, Cause and Effect Diagrams, Run charts, stratification, histogram,scatter diagram, control chart and force field analysis.

The second is *The Team Handbook*, by Peter R. Sholtes. This loose leaf book expands on the techniques used in organizing teams and implementing TQM processes. (The author has used in classes with industry mangers and found that it is the type of book they will refer to after completing the course).

Next is *Total Quality Management in Higher Education*, editors, Sheer and Teeter. The editors provide an introduction to the use of TQM in various institutions of higher education such as Oregon State University, Delaware County Community College and Virginia Polytechnic Institute and University.

In *a Quality System for Education*, Stanley J. Spanbauer, President of Fox Valley Technical College describes TQM as it has developed at FVTC since 1985.

Last is *Quality Quest in the Academic Process*, edited by Harris and Baggett. It contains series of articles written for the most part by faculty and administrators of Samford University, Birmingham, Alabama. It describes their implementation of TQM both in administration and in the classroom.

George Kreps
Associate Professor
Social Science Technology
The Ohio State University
Agricultural Technical Institute
Wooster, OH 44691

PLUS ONE

Using Global Student Rating Items for Summative Evaluation

William E. Cashin and Ronald G. Downey

Research has established the multidimensional nature of student ratings of teaching, but debate continues concerning the use of multiple- versus single-item ratings for summative evaluation. In this study the usefulness of global items in predicting weighted-composite evaluations of teaching was evaluated with a sample of 17,183 classes from 105 institutions. In separate regression analysis containing 2 global items—one concerning the instructor, the other concerning the course—each global item accounted for more than 50% of the variance in the weighted-composite criterion measure. Student, class, and method items generally added much less variance. These results suggested that, because global items accounted for a substantial amount of the variance, a short and economical form could capture much of the information needed for summative evaluation and longer diagnostic forms could be reserved for teaching improvement. (Reprinted with permission of the American Psychological Association, Inc., Journal of Educational Psychology, 1992, vol 84, No.4: 563-572.)

One of the continuing debates concerning the use of student ratings of teaching is the debate revolving around what kind of measures should be used for summative evaluation of faculty in making personnel decisions for retention, promotion, tenure, or salary increases, and of courses, to assess their effectiveness. Can one validly use a single item or index number for such decisions, or must one use multiple ratings?

During the past decade, probably no one has championed the case for the multidimensionality of student ratings more persuasively than Marsh (1984, 1987, 1989, 1991a, 1991b). The multidimensionality of student ratings has been amply demonstrated by factor analysis (Feldman, 1976a; Kulik & McKeachie, 1975; Marsh, 1991b; Marsh & Hocevar, 1984, 1991). In his comprehensive reviews of the literature, Feldman has variously identified 19 (Feldman, 1976b, 1983, 1984, 1987, 1989b), 22 (Feldman, 1988), and 28 (Feldman, 1989a) dimensions of instruction. On the basis of logical analysis of student rating items, Abrami and d'Apollonia (1990) added 3 categories to their clarifications of 19 dimensions previously identified by Feldman (1983, 1984): Overall Course, Overall Instructor, and Miscellaneous Items (e.g., "rate the suitability of the class size"). The Students' Evaluations of Educational Quality (SEEQ) Form, which Marsh (1982) developed, has nine dimensions: Learning/Value, Enthusiasm, Organization, Group Interaction, Individual Rapport, Breadth of Coverage, Exams/Grades, Assignments, and Workload.

Marsh (1984, 1987, 1989, 1991a, 1991b) contends that because students' ratings are multidimensional (e.g., an instructor may be well organized but lack enthusiasm), multiple ratings should be used. In his overview of the student rating research (Marsh, 1984, p. 709; Marsh, 1987, p. 262), three of the four perspectives he used as the frame of reference for his discussion were related to multidimensionality: (a) teaching effectiveness is multifaceted; (b) there is no single

criterion of effective teaching; and (c) different dimensions or factors of students' ratings will correlate more highly with different indicators of effective teaching.

Marsh (e.g., 1987, 1991b) has specifically raised the issue of using student ratings for summative versus formative evaluation. In this context, summative evaluation focuses on using student ratings to make a final judgment about an instructor's teaching effectiveness; formative evaluation involves using the ratings diagnostically, that is, to make a decision about possible ways to improve teaching. Marsh (1987) stated the following:

> Another dilemma in student evaluation research is the question of whether information for any one purpose is appropriate for other purposes, and particularly whether the same data should be used for diagnostic feedback to faculty and for administrative decision making. Many (for example, Abrami, Leventhal, & Dickens, 1981; Braskamp et al., 1985 [1984]; Centra, 1979; Doyle,1983) argue that high inference, global, summative ratings are appropriate for administrative purposes while low inference, specific, formative ratings are appropriate for diagnostic feedback. (p.260)

Marsh (1984) also stated, "If a single score were to be used, it should represent a weighted average of the different components where the weight assigned to each component was a function of logical and empirical analysis" (p. 711).

In a recent article, Marsh (1991b) returned to his concern for multidimensionality:

> In evaluating the need to distinguish among appropriately defined multiple dimensions, it is important to consider the purposes that the students' evaluations of teaching effectiveness are intended to serve.... For personnel decisions, some researchers argue that a single score is more useful than multidimensional ratings (Abrami 1988 1989); whereas others argue the opposite (e.g. Marsh,1987c). (p 285)

Although Marsh has made a persuasive case for the multidimensionality of student ratings and has entertained the possibility of using a single score if it were the average of weighted components, he has not discussed which components nor *what* weightings.

Perhaps the most frequent opponent of the necessity of using multiple dimensions for personnel decisions has been Abrami (1985, 1988, 1989a, 1989b; Abrami & d'Apollonia, 1990, 1991). He proposed, "for summative purposes, I favor the use of several global rating items. . . or a carefully weighted average of rating factors in lieu of separate factor scores" (Abrami, 1989a, p. 222). He detailed several arguments against using separate factor scores:

> First, I do not believe we have sufficient evidence to establish either what the dimensions of effective teaching are or whether and how they are interrelated. . .
>
> Second, I have concerns about the content validity of specific items and some of the dimensions they compromise *when ratings are used across a wide variety of courses, instructors students, and settings* [italics added]...
>
> Third, Cohen's (1981) quantitative review of the multisection validity studies suggests that many rating dimensions have lower correlations with student learning (e.g., Rapport = .31. Interaction = .22, Feedback = .31, Evaluation = .23) or *near zero* correlations with student learning (Difficulty =—.02) compared with Overall Course (.47) and Overall Instructor (.43) correlations with learning....

> Fourth, we know much less about the *generalizability* of the specific rating factors than global ratings.... (Abrami, 1989a, pp.222-223)

In an earlier article, Abrami (1985) used as an analogy—the Wechsler intelligence tests, which yield both general and specific scores. In those tests a single IQ score is used to summarize all of the subtests. The fact that a phenomenon or behavior is multidimensional does not of itself rule out using a unidimensional measure for evaluation.

We suggest that the student's final course grade offers an even better analogy than the Wechsler intelligence tests. Few would deny that a student's learning is multidimensional, yet teachers summarize multidimensional behavior into a single grade. All that a final course grade—or an evaluation of an instructor's teaching or a course's effectiveness—need do is to provide a usable measure of the level of overall performance. Only for formative evaluation—for diagnosis and improvement—is it necessary to provide information about multiple aspects of performance or worth, that is, which behaviors or aspects are satisfactory and which might benefit from improvement.

The controversy over whether to use a single criterion or multiple criteria is neither new nor unique to the use of student ratings. For example, Schmidt and Kaplan (1971) raised the same issue and concluded that the choice of criteria should be guided by the purpose for which the data are to be used and that personnel decisions could often be made by summarizing the performance of an individual with a *single* number.

A major obstacle to resolving the debate raised by Marsh (1984, 1987, 1989, 1991a, 1991b) and Abrami & Apollonia, 1990, 1991) is the lack of any agreed on criterion measure of instructional effectiveness. Indeed, this is the dilemma that has frustrated attempts to definitively demonstrate the validity of student ratings. Marsh's (1984) discussion of validity in his review of student-rating research was divided into five sections. The first reviewed multisection validity studies. Such studies student learning as the criterion of effective instruction. explicit in such studies is the assumption that the students more effective instructors will learn more.

However, student learning cannot be used as a measure instructional effectiveness without some caveats. For example Scriven (1981) stated, "The best teaching is *not* [italics add that which produces the most learning, since what is learned may be worthless" (p. 248). Scriven then offered a definition of "good teaching" that might serve as a criterion:

> Teachers are meritorious to the extent that they exert the maximum possible influence toward beneficial learning on the part of their students, subject to three conditions: (1) the teach process used is ethical, (2) the curriculum coverage and teaching process are consistent with what has been promised and (3) the teaching process and its foreseeable effects are consistent with the appropriate institutional and professional goals and obligations. (Scriven,1981, p.248)

Scriven (1981, 1989) has specifically recommended against the use of what he calls "style" items (e.g., "being well organized," "using discussion") because "no style indicators can be said to correlate reliably with short- or long-term learning by students *across the whole range of subjects levels, students, and circumstances* [italics added]" (Scriven, 1981, p. 251)

In developing what became known as the Instructional Development and Effectiveness Assessment (IDEA) student-rating system, Hoyt (1973b) wrestled with

the same issue. Initially he tried what he called the "model" approach, gathering items from a variety of sources: items describing aspects of thought to reflect effective teaching, that is, style items. He then sent these items to faculty to find out their reaction. One critic rather forcefully suggested that many of the items could reflect both bad teaching and good teaching, observe, for example, that "well-organized garbage still smells" (Hoyt, 1973a, p. 153). In the absence of a set of teacher behaviors that would be universally effective in all circumstances, Hoyt decided to evaluate instruction in terms of student self-reported progress on course objectives, the approach that eventually developed into the IDEA system (see Hoyt and Cashin, 1977).

Too often formative evaluation is confounded with summative evaluation. We suggested that the primary task making a summative evaluation of an instructor's teaching to make as accurate a judgment as possible about how effectively that instructor taught, controlling for the impact of a variables other than the instructor's teaching effectiveness. In such cases the evaluator's task is not to determine why the instructor was successful or unsuccessful or how his or her performance might be improved. The latter task is one formative evaluation—diagnosing for development or improvement—and is best performed by a person who is not involved in making personnel decisions. A similar approach can be taken to course evaluation. If summative evaluation indicates that the course is effective, no further data are needed. Only when summative evaluation indicates that there are problems with the course are detailed data helpful.

In the absence of any definitive criterion of effective instruction, we decided to use a measure of student learning, with controls for possible bias. Student learning has served as the criterion of instructional effectiveness in a number of studies (see reviews of Cohen, 1981; Feldman, 1989a). Because we had access to a large database, we could obtain ratings from a "wide variety of courses, instructors, students, and settings" as Abrami (1989a, p. 223) suggested. We believed that global student rating items—with biases controlled for where appropriate—would account for a substantial proportion of the criterion measure's variance. With a large data pool, most of the student rating items related to specific teaching methods or teacher behaviors; for example, being well organized (organization dimension) or using discussion (group interaction dimension) would not account for much additional variance in the criterion variable after the global-item and control-item predictors were entered. This is because not all teaching methods are equally relevant to helping students learn every course objective. Analysis conducted with IDEA items (Hoyt & Cashin, 1977; Cashin & Perrin, 1978) suggest that teaching behaviors that help students effectively learn in a course primarily concerned with content (e.g., being well organized) may be different from those that help students (a) effectively learn thinking or problem-solving skills or (b) develop self-understanding (e.g., using discussion). At least there are substantial differences in the correlations between various course objectives and different teaching methods. If this is the case, then some of Marsh's (e.g., 1984) dimensions, or Scriven's (1981) style items, would cancel each other out.

In this study we attempt to research the usefulness of global items, plus some control variables, for summative evaluation of instructors and of courses. We hypothesized that analysis of data using global items—along with controls for bias— would account for a substantial proportion of the variance in the criterion variable. We conceptualized bias as the influence of variables reflecting something other than the instructor's teaching effectiveness. Such variables could be student characteristics (e.g., the students' interest in the subject matter) or course characteristics (e.g., the size of the class or the difficulty of the subject matter).

Because of the breadth and variability in the data pool used, we hypothesized that remaining single teaching methods items would add little additional variance.

Method

Subjects

We analyzed average student ratings from 18,359 classes: all of the classes that used the IDEA 38-item diagnostic form (Center for Faculty Evaluation and Development Kansas State University,1988) during the 1989-1990 academic year. Classes in which ratings were obtained from fewer than 5 students were excluded, as were classes with missing data. Complete data were available for 17,183 classes. Those 17, 183 classes constituted the "subjects" in this study. These classes were from 105 institutions of higher education (104 U.S. institutions and I Canadian institution). These institutions ranged from two-year colleges and technical institutes to four-year liberal arts colleges and research universities. The courses represent a very broad sample of academic, professional and technical fields at both the undergraduate and graduate levels; however, typically IDEA was not used by the entire institution. We used class means for each item rather than individual student ratings, as the units of analysis. So, for example, the means reported in the Appendix are the means of the 17,183 classes on a given IDEA item, not the means of the individual student ratings. Likewise, the standard deviations indicate variation among the class means.

Instrument

The IDEA Survey Form (Center for Faculty Evaluation and Development, Kansas State University, 1988) was used to obtain the student ratings (see the Appendix for the wording of the items). The IDEA form consists of four sections: Part 1. Instructor methods (Items 1-20); Part 2. Student progress ratings on course objectives (Items 21 -30); Part 3. Course description (Items 31-34); and Part 4. Students' self-ratings (Items 35-38). The 1988 version also contains 7 research questions (Items A-G). Two of those items were the global or summary items used in this study:

E. "Overall, I rate this INSTRUCTOR an excellent teacher."
F. "Overall, I rate this an excellent COURSE."

The students rated how descriptive items E and F were on a 5-point scale ranging from *Definitely False* (1) to *Definitely True* (5).

IDEA is a unique student rating instrument in that it treats student learning as the primary measure of instructional effectiveness. Student learning is measured by the student's self-report of his or her learning progress on a set of 10 general course objectives, Items 21-30. Furthermore, in the IDEA system, the instructor or someone at the institution weights each of these objectives for each course. A 3-point scale is used: *essential, important, of no more than minor importance (minor important).* Only the objectives weighted as essential or important for that specific course are used in computing an Overall Evaluation (Progress on Relevant Objectives) measure. This Overall Evaluation measure served as the criterion variable in this study. The IDEA comparative data can also take into account the influence of the level of student motivation (on the basis of the students' responses to Item 36 "I had a strong desire to take this course") and the influence of class size (on the basis of the number of students

enrolled in the course, data provided by the institution). In addition to the these items, the students rate teacher method/behavior (Items 1-20) and course characteristics (Items 31-34) using items similar to those included in other student rating forms.

Analysis

Because there is no agreed on definition or criterion measure of effective teaching, for this study we used the IDEA Overall Evaluation (Progress on Relevant Objectives) measure as the criterion. (This approach is very similar to that suggested by Abrami, 1988; and Abrami, Leventhal, & Dickens, 1981, in which class mean achievement—a measure of student learning—was proposed as the criterion measure.) This Overall Evaluation measure is a *weighted composite* of the 10 IDEA course objectives (Items 21-30 on the IDEA Survey Form: see Appendix). For example, course objectives include the students gaining factual knowledge, their learning how to improve rational thinking and problem solving, or their developing self-understanding. For each course the instructor (or, especially in the case of a multisection course, a curriculum committee or the department chairperson) weights how important each of the 10 objectives is for that specific course. These weights are applied in the computer analysis to the class mean of the students' ratings of their progress on each of the 10 objectives. Essential objectives receive double weights; important objectives receive single weights, and minor important objectives receive zero weights and are dropped from the calculation of the Overall Evaluation measure. (See Cashin & Perrin,1978, for a detailed description of the calculations and of the comparative data used.) The result is a weighted-composite measure of how much progress the students reported making on the learning objectives the instructor was to emphasize in that specific course. This weighting procedure meets, at least partially, Scriven's (1981) conditions that student learning be consistent with promised curriculum coverage and fit the institution's goals. This weighted composite—Overall Evaluation—measure was used as the criterion variable in this study.

As predictors we used the 2 global items: instructor (Item E), and course (Item F). In addition, we used 3 control items. The first was a student characteristic variable, student motivation. At present Item 36, "I had a strong desire to take this course," is used in the IDEA system (Cashin and Perrin, 1978) to control for initial student motivation. Although Item 36 seems to primarily measure student characteristics, it is possible that it may also reflect instructor characteristics. For example, part of a student's desire to take a course might be due to the instructor's reputation as an effective teacher. We designed research Item D, "I really wanted to take this course REGARDLESS OF WHO TAUGHT IT," to better measure the students' motivation, independent of instructor influence. The remaining two control variables were course characteristic variables: Item 33, "Difficulty of subject matter" (difficulty) and size of class, based on the number of students enrolled in the course (data provided by the institution). The IDEA system divides classes into four sizes: small = 1-14 students, medium = 15-34, large = 35-99, and very large = 100 or more students. In the analysis, *small* classes were assigned a value of 1, *medium* classes, a value of 2, and so forth.

Results

We used a multiple regression approach to determine how much of the variance of the criterion variable, Overall Evaluation, was accounted for by each of the two global predictor variables: research Items E (instructor) and F (course), plus the three *control* variables: Item D (motivation), Item 33 (difficulty), and size of class.

The Appendix, in addition to giving the wording of the IDEA items used in this study, gives the mean and standard deviation for each item, calculated from the 17,183 class means. Because the Overall Evaluation measure is a composite rather than a single item, it is not included in the Appendix; its mean was 56.8 and its standard deviation was 9.63. Nor does the Appendix include the mean or standard deviation for the size of class variable, which is based on the number of students enrolled in the course, according to data provided by the institution. For the regressions we used the four class sizes described in the *Analysis* section; the mean was 1 .91, and the standard deviation was 0.68. Although we did not use the data in the regressions, the mean number of students enrolled was 24.8, and the standard deviation was 20.5.

Item reliabilities were not calculated from the 1989-1990 data. However, item reliabilities for identical (Item 35) or similar items (Item 36 for Item D, Item 37 for Item E, Item 38 for Item F) from the IDEA Standard Form 23,488-class database (Cashin & Perrin, 1978) were available for classes with exactly 10,20, and 40 raters. Because the average number of raters for our 17,183 classes was 24.8, we used the item reliabilities for 20-rater classes. These were split-half reliabilities for which two means were calculated for every class, one calculated on the ratings of the odd-numbered students and one on the ratings of the even-numbered students. These means were correlated across each class and then corrected with the Spearman-Brown formula. The reliabilities for 20-rater classes were based on data from 415 classes. These were used to estimate the item reliabilities for the 4 items (Items 35, D, E, and F). All of the estimated reliabilities were in the .80s: .85 for Item D: "I really wanted to take this course REGARDLESS OF WHO TAUGHT IT" (correlated .75 with Item 36 from the IDEA Standard Form database); .88 for Item 33: "Difficulty of subject matter" (identical in both databases); .88 for Item E: "Overall, I rate this INSTRUCTOR an excellent teacher" (correlated .92 with Item 37); and .82 for Item F: "Overall, I rate this an excellent COURSE" (correlated .86 with Item 38).

Reliabilities had not been calculated for the Overall Evaluation measure; reliabilities for the individual course objective items ranged from .77 (Items 22 and 27) to .88 (Item 29). Given these reliabilities, even single items—from 20 or more raters—are reliable enough to be interpreted *individually*.

Table 1 gives the R and R^2 values between the criterion measure and each of the 5 individual IDEA items used as predictors: motivation, difficulty, size of class, instructor, and course; the R^2 for these individual items are actually zero-order correlations. The zero-order correlations of the 3 control variables with the Overall Evaluation measure ranged from .31 for the motivation item to -.19 for size of class. In using statistical tables for 1,000 cases (or classes), almost every result will be statistically significant. In fact almost all of the multiple correlations in this study were significant at the .0001 level. However, we decided that to be of *practical* use, a variable should account for at least 5% of the (additional) variance. Using that rule of thumb, we found that the only control item that met our 5% rule was the motivation item; it accounted for 9% of the variance in the Overall Evaluation measure ($r = .31$). The R for the three control

Table 1

Correlations of Selected Instructional Development and Effective Assessment (IDEA) Items with the Criterion Measure IDEA Overall Evaluation

Items	*R*	R^2
Control		
Motivation (M)	.31	.09
Difficulty of subject matter (D)	.01	.00
Size of class (S)	-.19	.04
M + D + S	.34	.12
Global		
Instructor (I)	.74	.54
I + M	.76	.57
I + M + D + S	.77	.59
I + M + D + S + Item 15[a]	.82	.68
I+M+D+S+items 15and34[a]	.86	.73
Course (C)	.77	.60
C + M	.77	.60
C + M + D + S	.79	.62
C+ M + D+ S+ Item 15[a]	.84	.71

Note. Item 15 is "Stimulated students to intellectual effort beyond that required by most courses" and Item 34 is "Degree to which the course hung together (various topic and class activities were related to each other)." N = 17,183 classes. All correlations greater than .081 are significant at the .01 level.

[a] Data-determined stepwise regression analysis resulting after forcing first four variables into the equation.

items combined was only marginally larger, .34 or 12% of the variance; difficulty of subject matter and size of class combined did not add another 5% to the variance accounted for by the motivation item.

On the other hand, each of the 2 global items explained at least 50% of the variance in the criterion variable: instructor, 54% (r = .74), and course, 60% (r = .77). When each of the global items was combined with the control variables—motivation, difficulty of subject matter, and size of class—to determine the percent of variance in the Overall Evaluation measure that each combination explained, the percentages were as follows:

instructor + motivation + difficulty + size = 59% (R = .77); and
course + motivation + difficulty + size = 62% (R = .79).

Combining the motivation item with each of the global items did not account for an additional 5% of the variance for any global item, and when all 3 control variables were combined, they added 5% only in the case of the instructor item (from 54% to 59%).

The IDEA research questions also contained a third global item on learning: Item G. "Overall, I LEARNED A GREAT DEAL in this course." This item correlated .83 with the criterion measure. However, because instructor and course items are the most commonly used global items (e.g., Abrami &

d'Apollonia, 1990), and because the learning item correlated .89 with the course item, we decided to discuss only the instructor and course global items.

After forcing the variables described above, into the equation, we permitted the regression analysis to select the order of the remaining rating items. This would test whether our original combinations accounted for all of the practically useful variance. In both cases they did not. For the instructor item plus controls (59% of the variance), Item 15, "Stimulated students to intellectual effort beyond that required by most courses," added an additional 9% to the explained variance, and Item 34, "Degree to which the course hung together (various topics and class activities were related to each other)" added another 5%. Together Items 15 and 34 added 14%. For the course item plus controls, again Item 15 entered next, adding 9%; no other item added at least 5%.

We also performed two data-determined stepwise regression analysis—with none of the independent variables forced—to determine whether there were better possible combinations of variables than the ones we had forced. We excluded Items 21-30 because the Overall Evaluation item was based on those 10 items. We also excluded Items 36-38 because they were variations of items already available. Therefore, in these stepwise regression analysis, Items 1-20, 31-35, A, B. and D were used as possible predictors. In addition, the first analysis made available only one of the global items, the instructor Item (E), and the second analysis made available only the course item (F).

For the stepwise regression analysis, which included the instructor item (E), the 1st item to enter was not the instructor item, but Item 20 ("Introduced stimulating ideas about the subject"), which accounted for 58% of the variance. The next was Item 34, which added 11%. No other item added 5% to the explained variance. The instructor item was the 20th to enter (increment in R^2 significant at the .0003 level). The motivation item entered 6th, and the difficulty item entered 10th. The size variable was not included in the pool. For the analysis that included the course item (E), that item entered 1st (60%), followed by Item 15 (10%). The next item was Item 34 but it only accounted for 3% of the variance. The difficulty item entered 12th, and the motivation item entered 20th.

Discussion

We interpret our results as lending support to our first hypothesis that global items, plus some control variables, would explain a substantial proportion of the variance of a measure of teaching effectiveness. Our results support the position of Abrami and his colleagues (Abrami 1985, 1988, 1989a, 1989b; Abrami et al., 1981) that global items account for much of the useful information that student ratings provide for making personnel decisions and that it is not necessary to use all of the dimensions of student ratings for such decisions.

With regard to Marsh's (1982) dimensions, the IDEA items used in this study appear to overlap with at least six of the nine SEEQ dimensions: Learning/Value, Organization, Group Interaction, Exams/Grades, and Workload. The three dimensions seemingly not covered by the IDEA items were Individual Rapport (e.g., friendly toward students), Breadth (e.g., contrasts implications of various theories), and Assignments (e.g., required reading/texts were valuable). Our course global item would fit Marsh's Learning/Value dimension, the dimension on which his overall course rating had the highest loading. Our instructor item would fit his Enthusiasm dimension, the dimension on which his overall instructor rating loaded highest. None of the SEEQ items appear to be substitutes for our motivation or size control variables. Marsh's

Workload/Difficulty dimension clearly fits our difficulty variable. Our Item 15, on stimulation of intellectual effort, which fits Abrami and d'Apollonia's (1990) dimension—Intellectual Challenge and Encouragement of Independent Thought— might be forced into Marsh's Learning/ Value dimension. Item 34, on content integration, would fall into Marsh's Organization dimension. Because difficulty and size of class added little to our predictions—similar to the contribution of motivation, for that matter—basically three of Marsh's dimensions (Learning/Value, Enthusiasm, and Organization) would, in our judgment, account for all of the practically useful variance in our criterion measure. All nine dimensions would not be needed. Whether the same would hold for other criterion measures is, of course, an empirical question, but we hypothesize that similar results would be found.

We conceptualized the global items to represent single measures of instructional effectiveness (similar to Cranton & Smith's, 1990, study when class means were the units of analysis). However, in justice to Marsh's (1984, 1987, 1989) position, it should be pointed out that, by using control variables, we were in fact using a multidimensional measure but only selected dimensions, not the total number of dimensions covered in the 38 IDEA items, plus the 7 research items.

Our second hypothesis, that no additional items—especially teaching method items—would add much to the explained variance, was not supported. Our individual global items, even with 3 additional control items, did not account for all of the practically useful variance in the criterion measure. On the basis of the results of this study, a few of the teaching method items contributed to the explanation of additional, useful variance. Item 15: "Stimulated students to intellectual effort beyond that required by most courses" explained at least 5% more of the variance for each of the global items, even with the control variables already added. Item 34: "Degree to which the course hung together (various topics and class activities were related to each other)" only contributed to the equation containing the global instructor item. Although Item 34 is considered a course description item in the IDEA system, we believe it to be a measure of teaching behavior.

In examining the additional variance explained by 3 control items after each global item was entered, we were surprised to find that they added so little. We expected that at least motivation and size of class would add something useful, according to studies by Feldman (1978, 1984) and by Cranton and Smith (1986). Although adding the 3 control items— motivation, difficulty, and size of class—to the instructor item did increase the explained variance to 59% (an increase of 5%); the control variables only increased the course item to 62% (an increase of only 3%). Thus, even though the control variables accounted for 12% of the variance when entered first, adding them to the global items explained little additional variance in the Overall Evaluation measure.

We believed that the hybrid nature of the IDEA Overall Evaluation measure would contribute something unique to research on student ratings. Unlike most other research, which has used either single items or a simple summing of several items, the IDEA Overall Evaluation measure is a weighted composite. The instructor—or a faculty committee or the department head—weights the 10 IDEA course objective items (Items 21-30) for each specific course. By means of this weighting, flexibility is introduced into the IDEA system, thus avoiding the problem of assuming that all courses have a single, common instructional goal and therefore that there is only one correct way to teach them.

Because the Overall Evaluation measure is an "apples and oranges"

creation, we thought that it would more accurately reflect instructional effectiveness. However, we did not anticipate that a single, global item would account for so much of the overall evaluation measure's variance. The *r* of .77 for the global course item probably accounts for most of the variance that the reliability of the measure allows. On the other hand, the hybrid nature of overall evaluation did not cancel out the relevance of all of the teaching method items.

Of the 2 global items, the instructor item (E) was the most disappointing. When none of the variables were forced into the regressions, it did not enter first in its group. In retrospect, we should have expected this. Our criterion measure—the IDEA Overall Evaluation (Progress on Relevant Objectives)— is primarily a measure of learning (of the students' self-report of their progress on course objectives). The students' learning is only secondarily a measure of the instructor's teaching. We hypothesize that, if we were able to generate a composite teaching criterion measure of only those teaching methods relevant to the objectives of that specific course, the instructor item would be the first predictor to enter into such an equation and it would correlate more highly with such a criterion measure than would the course item.

Perhaps the most obvious limitation of our design was that we used student ratings as both the criterion measure and the predictor variables. However, the students did not determine the weights to be assigned to their ratings of the items used in the criterion measure; rather, the instructor or a curriculum committee or department chairperson did. Furthermore, Cohen's (1981), and more recently Feldman's (1989a) literature reviews support the use of student ratings of their learning (which is what the IDEA Overall Evaluation measures) as a validity criterion. Students who report learning more tend to score higher on an external exam: an exam developed by someone other than the instructor. There is also a great deal of research support for the validity of self-report in general (see Balk, Hoyt, Hanna & Frieman, 1989, for a list of 18 citations.)

Another limitation of the study is that we used, as our measure of teaching effectiveness, the IDEA Overall Evaluation, which is more a measure of student learning—actual students' perceived learning—than of teaching effectiveness per se. Persuasive arguments can be made for this use (see Cohen, 1981, Feldman, 1989a).6 However, student variables (as opposed to instructor variables) are likely to account for much of what students learn. Not only are the students' motivation to take the course and the students' effort relevant but such factors as intelligence, background in the subject matter, and so forth are also likely to influence student learning and thus be related to their self-reports of learning. Because one of our purposes was to find a measure with which to assess the instructor's teaching effectiveness (to be used for personnel decisions), we needed to find some way to control for the student variables. The one student characteristic control variable we studied accounted for little of the variance in the criterion variable, so we failed in that endeavor. We use the term *failed* because we still believe that a significant proportion of the variance in any measure of student learning will be related to student variables. Therefore, it would be unreasonable— and unfair—to hold the instructor totally responsible for the students' learning.

As a final caution, an anonymous reviewer raised the question of whether using a sample containing so many different kinds of institutions might make our results less useful. Might it be better to use a sample of representative institutions? We could not accomplish that with our data (nor has any other student rating system been able to use such a sample). Although we have data from 105 institutions in our sample, typically IDEA is not used across the entire

institution, so our samples are rarely representative of an institution. The Student Instruction Report from the Educational Testing Service is probably still the most widely used student rating system in the United States. In their most recent update (Educational Testing Service, 1990), they continued to be careful to say "comparative rather than normative data." The best that organizations that make their student rating systems available to other campuses can claim is "norms of convenience." We believe that there are two advantages to our using a larger. more varied sample. First, the results are potentially more generalizable. Second, an earlier analysis (Cashin & Perrin, 1978) indicated that the means for the 38 IDEA items varied very little across classes from associate-, baccalaureate-, master's-, and doctoral-level institutions. The average maximum difference across the highest and lowest mean ratings for the four types of institutions on the 38 items was .16, although the maximum difference was .4 for 2 items (Items 17 and 31). Nevertheless, as with any study that is not conducted at the instructor's own institution, readers are encouraged to conduct further research to test the extent to which the results of this study apply to their local campuses.

The results of this study have supported that single, global items—as suggested by Abrami (1985)— can account for a great deal of the variance resulting from a weighted composite of many multidimensional student rating items. The course item alone accounted for 60% of the variance, and the instructor item accounted for 54%. We still hypothesize that a better criterion measure of the instructor's teaching effectiveness will correlate highly with an item such as "Overall, I rate this INSTRUCTOR an excellent teacher." Finding such a criterion measure is of more than theoretical interest. If such a relationship can be demonstrated, colleges and universities could use a very short evaluation form in every class every term to assess instructional effectiveness. Such a short form would save the students' time and the institution's money and still provide evidence about instructors who are teaching well and courses that are accomplishing their objectives. It could also serve to alert those instructors who are not doing an effective job teaching a given course so that they might focus their improvement efforts on that course. In addition to saving both time and money, it would permit instructors to use a long, diagnostic form—for improvement—in one course per term, that is, in the course in which they want to improve. We think that students will be more willing to rate carefully the items on such a long form if they know that long forms are used only when the instructor is working to improve the course.

Appendix

Instructional Development and Effective Assessment (IDEA)

Item Means and Standard Deviations for 1989-1990

IDEA item	*M*	*SD*
Part 1. Instructor methods		
Describe the frequency of your instructor's teaching procedures, using the following code: 1—Hardly Ever 2—Occasionally 3—Sometimes 4—Frequently 5—Almost Always.		
1. Promoted teacher-student discussion (as opposed to mere response to questions).	4.14	0.65
2. Found ways to help students answer their own questions.	3.88	0.61
3. Encouraged students to express themselves freely and openly.	4.22	0.61
4. Seemed enthusiastic about the subject matter.	4.46	0.50
5. Changed approaches to meet new situations.	3.78	0.60
6. Gave examinations which stressed unnecessary memorization.	1.98	0.61
7. Spoke with expressiveness and variety in tone of voice.	4.05	0.66
8. Demonstrated the importance and significance of the subject matter.	4.26	0.51
9. Made presentations which were dry and dull.	2.00	0.65
10. Made it clear how each topic fit into the course.	4.08	0.52
11. Explained the reasons for criticisms of students' academic performance.	3.46	0.61
12. Gave examination questions which were unclear.	1.88	0.63
13. Encouraged student comments even when they turned out to be incorrect or irrelevant.	3.99	0.56
14. Summarized material in a manner which aided retention.	3.73	0.60
15. Stimulated students to intellectual effort beyond that required by most courses.	3.56	0.62
16. Clearly stated the objectives of the course.	4.17	0.56
17. Explained course material clearly, and explanations were to the point.	4.03	0.65
18. Related course material to real life situations.	4.15	0.65
19. Gave examination questions which were unreasonably detailed (picky).	1.96	0.68
20. Introduced stimulating ideas about the subject.	3.85	0.66
Part 2. Student progress ratings on course objectives		
On each of the objectives listed below, rate the progress you have made in this course compared with that made in other courses you have taken at this college or university. In this course my progress was: 1—Low (lowest 10 percent of courses I have taken here) 2—Low Average (next 20 percent of course) 3— Average (middle 40 percent of courses) 4—High Average (next 20 percent of courses). 5—High (highest 10 percent of courses).		
21. Gaining factual knowledge (terminology, classifications, methods, trends).	3.83	0.54
22. Learning fundamental principles, generalizations, or theories.	3.79	0.53
23. Learning to apply course material to improve rational thinking, problem-solving and decision making.	3.74	0.60
24. Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course.	3.81	0.59
25. Learning how professionals in this field go about the process of gaining new knowledge.	3.60	0.64
26. Developing creative capacities.	3.52	0.67
27. Developing a sense of personal responsibility (self-reliance, self-discipline).	3.76	0.56
28. Gaining a broader understanding and appreciation of intellectual-cultural activity (music, science, literature, etc.).	3.16	0.78
29. Developing skill in expressing myself orally or in writing.	3.33	0.83
30. Discovering the implications of the course material for understanding myself (interests, talents, values, etc.).	3.50	0.64

Part 3. Course description

On the next four questions, compare this course with others you have taken at this institution, using the following code: 1—Much Less than Most Courses 2—Less than Most 3— About Average 4— More than Most 5— Much More than Most.

	M	SD
31. Amount of reading.	3.07	0.82
32. Amount of work in other (non-reading) assignments.	3.28	0.69
33. Difficulty of subject matter.	3.28	0.64
34. Degree to which the course hung together (various topics and class activities were related to each other).	3.81	0.49

Part 4. Students' self-ratings

Describe your attitudes toward and behavior in this course, using the following code: 1— Definitely False 2— More False than True 3— In Between 4— More True than False 5— Definitely True.

35. I worked harder on this course than on most courses I have taken.	3.55	0.60
36. I had a strong desire to take this course.	3.59	0.69
37. I would like to take another course from his instructor.	3.92	0.76
38. As a result of taking this course, I have more positive feelings toward this field of study.	3.86	0.64

Research items

For the following questions, A-G, indicate how descriptive each statement is by blackening the proper space. 1—Definitely False 2— More False than True 3— In Between 4— More True than False 5— Definitely True.

A. The instructor gave tests, projects, etc., that covered IMPORTANT POINTS of the course.	4.20	0.53
B. The instructor gave projects, tests, or assignments that required ORIGINAL OR CREATIVE THINKING.	3.73	0.73
C. I really wanted to take a course FROM THIS INSTRUCTOR.	3.39	0.70
D. I really wanted to take this course REGARDLESS OF WHO TAUGHT IT.	3.32	0.59
E. Overall, I rate this INSTRUCTOR an excellent teacher.	4.10	0.70
F. Overall, I rate this an excellent COURSE.	3.87	0.62
G. Overall, I LEARNED A GREAT DEAL in this course.	4.06	0.59

Note. N = 17, 183, classes.

William E. Cashin
Center for Faculty Evaluation Development
Kansas State University
Manhattan, KS 66506

Ronald G. Downey
Office of Educational & Research
Kansas State University
Manhattan, KS 66506

PRACTICUM

The Simultaneous Teaching of Accounting and Economics to the Two-Year Student

Ralph Lindeman

Ralph Lindeman examines effective teaching techniques which may be used for accounting and economics and to determine the areas where different approaches may be required and where common techniques are appropriate (The analysis is segmented into three parts. First, an overview of each subject is considered. Next, commentary on the student base for each course is provided. Finally, effective teaching techniques, student study habits, and learning enhancement suggestions are offered.

When a colleague of mine in the Kent State regional campus system learned a few years ago that that I had been asked to teach economics in addition to my core responsibilities in accounting, he exclaimed, "That's impossible."

That may have been a bit of an overstatement, but it does highlight the common perception of the difference between the two subjects. Indeed, accounting and economics are different subjects,requiring different thought processes and, from the student's standpoint, a different learning process. At the same time, there is much commonality between the two which also bears consideration.

Overview of Accounting. The subject of accounting often conjures up "green eyeshade" images in the minds of many people who think of accounting as glorified bookkeeping. But those of us who are in the field, either in academia or the business world,know it is much more. The textbook used in the introductory accounting courses at the Geauga Campus of Kent State (Meigs and Meigs, 1993) attempts to address this misperception through its title, *Accounting: The Basis for Business Decisions*. The text reinforces this emphasis throughout, both by inclusion of numerous business case studies and by incorporation of both financial and managerial accounting sections in one volume. Accounting should, indeed, be the basis for many business decisions. In fact, accounting data is at the forefront of most management reporting by systems in industry. This is not to say that the fundamentals of W accounting systems and record keeping should be de-emphasized. These are important parts of accounting and are appropriately almost the sole focus of Accounting I. At the same time, the definition of accounting needs to be inclusive of the managerial aspects, the analysis of data and its use by management.

Meigs and Meigs have developed a succinct definition of accounting which emphasizes both financial and managerial aspects. Their definition that "accounting is the art of interpreting, measuring, and communicating the results of economic activities of an enterprise" is not only comprehensive, but also introduces the second topic of this paper, economics.

Overview of Economics. The most succinct definition of economics is simply "the study of scarcity." However, a more meaningful and comprehensive definition defines economics as"concerned with the efficient utilization or

management of limited productive resources for the purpose of attaining the maximum satisfaction of human material wants" (McConnell and Brue, 1993).

Economics is fundamentally a study in allocation of scarce resources. As humans, almost all of us have insatiable desires—we can't seem to get enough of what we want.In economics, these needs or desires focus on economic goods and services.

Economics is a much broader topic than accounting. While accounting contains its theoretical aspects, the importance of economic theory is more central to the overall subject and has manifestations in almost every aspect of economics. The conceptual aspects of economics need to be continually emphasized in the development of course material and instructional methods to achieve maximum student comprehension.

Another important aspect of economics is its ubiquitous role. Outside of income taxes, one can go through his/her life without confronting directly the topic of accounting, but the topic of economics cannot possibly escape us: it affects too much of our lives. One of the most remarkable Gallup Polls of all time drives home this point. In 1943, right in the middle of World War II, the Gallup organization surveyed the populace as to the most important problem which would face the nation in the year ahead. Amazingly, most people thought jobs and economic readjustment was the primary issue, while concern for peace prospects drew only modest interest (Schiller, 1983).

Additionally, the economics courses taught at the regional campuses carry the identical catalog number and course description as the course taught on the main Kent Campus. Regional campus faculty are required to adhere to the Kent Campus content as closely as possible. This includes the examination process, where the majority of questions must be multiple choice.

These differences are reflected in the student population covering the two subjects. At the regional campus level, most students taking Accounting I fall into one of two categories. The computer technology, or accounting majors pursuing a two-year degree, or 2) students using those technical courses which articulate to respective four-year degrees in the same fields. For those students in the latter classification, careful advising is paramount since not all two-year courses articulate to the four-year program.

Students in economics spread a much more diverse population. Because economics is a liberal education course, one finds students from numerous majors in the first microeconomics course and almost as diverse a population in macroeconomics. Professors may find students from such diverse majors as forestry management, fashion merchandising, biology, history, psychology, engineering technology, political science, and music. In addition, all business management and computer technology majors must take at least the microeconomics course.

Teaching Techniques in Economics. Effective teaching techniques in economics must comprehend the broad student base outlined above. An interesting issue in economics focuses on exactly what kind of a subject it is. Conventional wisdom classifies economics with the social sciences. Certainly from several aspects, economics is clearly a social science, encompassing elements of people working/existing together in groups. On the other hand, many facets of economics, in particular microeconomics, relate very closely to the business management field. This linkage between the social sciences and business is perhaps best reflected in the organizational alignment at colleges and universities in Ohio. At Kent State, for example, the economics department forms an integral part of the College of Business. At nearby Lakeland

Community College where I taught part-time before joining Kent State full-time, economics resides in the social science department. Other institutions, such as Capital University, prefer a third arrangement where the economics department is a separate entity.

This diversity implies that effective teaching methodologies should endeavor to bring students into both worlds. Since the instructor is working with both business majors and students from several other disciplines, an effective technique from the start of macroeconomics is to relate the subject to their everyday lives. Many students very apprehensive about their first economics course. Many of them have heard about the history of low grades in this initial course, and starting the semester with a somewhat low-key approach has helped to alleviate these anxieties beginning with the very first class.

While economics clearly is a challenging course, part of this fear and subsequent low performance surfaces from the student body. Students not used to quantitative-type analysis combined with conceptual type thinking involved in the theoretical aspects of economics, as with some social science and other liberal arts majors, find that the learning process can be challenging.

A major aspect of learning economics, which is not present in the introductory financial accounting course, is heavy use of charts and graphs. So important is the use of graphs that the McConnell text includes a special appendix to chapter One which deals solely with graphs and their use in economics. Through review of this material, no later than the second week of each semester, the instructor is able to assess quickly whether a particular class relates to graphs.

In the microeconomics course, graphs are most important in dealing with the four market models, the four classifications of industrial competition. One technique used at the Geauga Campus which has proven to be especially helpful is to teach students to identify the point of intersection between marginal cost and marginal revenue. Regardless of which market competitive model is being discussed, the point of maximum profitability for the firm will occur at this intersection. By having students learn to concentrate on this point in the first market model studied, then reinforcing this technique as the other three markets are covered in subsequent chapters, students are better prepared for exams which often include graphs similar to those presented in the text.

Other instructional techniques which have proven helpful include 1) the use of sample quizzes, both as hand-outs covered in class and through a data base used in computer labs and 2) instructor-prepared hand outs on key topics. With regard to the latter, because economics textbooks do not typically provide "student friendly" study aides, the instructor-prepared handouts supplement the text by explaining key points in language a noneconomics major can understand. Students have found the sample quizzes a good learning technique for exam preparation. A final important point is the theoretical aspects of economics. Although a good deal of theory is also associated with accounting, the manifestations of accounting theory are typically codified in authorized pronouncements from groups such as the FASB which regulates accounting practice. In economics, the theory is subject to continual change, and students are encouraged to be critical thinkers in that "permanent" theories are subject to the test of time, and may well be revised.An example I use frequently is the Phillips Curve, which describes an inverse relationship between inflation and unemployment. Although this relationship seemed to hold true during the first half of the twentieth century, data over the past 20 years have brought the reliability of this theory into question.

Teaching Techniques in Accounting. The teaching of accounting at the two-year level needs to emphasize vocational aspects more than economics does. Students in economics will naturally see a benefit in their lives through their roles as consumers. In accounting, however, students need to focus on applying what they learn directly to their career development. Since most students taking accounting are either business management, computer technology, or accounting majors, their futures are almost certainly in the business world. For accounting majors, this usually means a career specifically in accounting or a closely related field. While at one time this meant public accounting for many,i.e.,working for a CPA firm, in the 1990s and beyond, a much higher proportion are likely to move directly into private accounting where they will perform accounting work for a corporation. The implications of this trend is that the career direction for an increasing majority will focus more on managerial accounting the internal use of financial data within a firm, rather than pure financial accounting. To succeed in the corporate world, many will broaden out even further the world of finance. One trend is the increasing role of the Chief Financial Officer (CFO) in the strategic planning process. In many firms, the (CFO) rather than the marketing direction now spearheads the company's strategic planning activities.

To emphasize the increasing importance of managerial accounting, it has proven helpful to incorporate the decision making aspects of accounting into all accounting courses, except perhaps the first principles course. Although financial and managerial clearly have a different focus, the accounting data typically come from the same data base. By having students think in both financial and managerial terms, the concept of analyzing the data rather than just compiling it is reinforced.

In terms of specific teaching techniques, accounting tends to be more of a memory course than economics does. In addition to learning the methodology from the text, I have found repetitive, class exercises to be a valuable learning tool. As a result, use of overhead transparencies tends to be greater in accounting than in economics. Viewing the answers to exercises on the overhead helps to instill the learning process. Transparencies used in the classroom are not only from homework reviews, but also from in-class exercises which are also assigned.

Another difference in teaching accounting reflects the nature of the examinations which are more diverse in accounting than in economics. Accounting exams may include objective questions, exercises, problems, short essay, definitions of terms, and sometimes major essays. The homework assigned includes all of these types of questions which are reviewed in class and, where help seems to be needed, are supplemented through in-class exercises.

A final instructional technique in accounting is visualization. A key concept students need to master in the fundamentals course is how to do compound journal entries, i.e., an entry where two or more accounts are debited and/or credited. For many students, the hard part is developing a framework for the entry, i.e. determining the first one or two accounts. When problems developed, I suggest they "take a step back" and try to visualize the business transaction which has occurred. As an example, if someone has bought a truck partly for cash and partly for credit, the student should visualize (perhaps "seeing" someone sitting in a banker's office) that a truck has been acquired with partial payment in cash and the remainder through some form of financing. Such an example should lead the student to realize there will be two credit entries to handle the vehicle purchase.

Summary and Conclusion. The simultaneous teaching of accounting and economics requires the instructor to continually monitor the different

perspectives of each subject. Two parameters express these differences most succinctly. First is the role of value judgements, which are critical in economics but much less important in accounting. Value judgements involve one's beliefs as to the proper role of the government in managing the economy—and indeed the nation as a whole. As an instructor with the forum to shape beliefs, it is important to distinguish facts from beliefs.

When value judgements are discussed, students need to be made aware that the topic being analyzed involves one's personal belief system and that there are no purely "right" or "wrong" answers.

The second key parameter is terminology differences. This is especially true when the instructor sees the same student in both an economics an accounting class in the same semester. Again, the key point is maintaining the different perspective of each course.

A relevant example is the definition of the term "profit." Although the general formula for profit, sales minus costs, is the same for both subjects, the definition of cost is different. In accounting, costs include only those "cash and cash equivalents" which can be measured objectively (Skousen, et al, 1995). Economics adds the concept of opportunity cost, the value of alternative courses of action given up, to the definition of cost. This broader definition means that accounting profits, as measured, will be higher than economic profits. In fact, in an purely competitive economic system, economic profits will be zero.

It has been not only a challenging, but also a rewarding experience to teach economics as well as accounting the past three years. One of the most significant benefits came when I was confronted with the Certified Management Accounting (C.M.A.) examination. The C.M.A. revealed overlap between the two subjects, an important part of the exam focused on economics,—that I had been teaching both accounting and economics definitely helped me to successfully complete this exam.

Ralph W. Lindeman
Assistant Professor, Accounting and Business Technology
Kent State University
Geauga Campus
Burton Twp., OH 44021

Disseminating Institutional Research

Derick Kiger

The Owens Community College's Office of Institutional Research has designed a "portfolio" method for disseminating institutional research to the college community. Derick Kiger shares it with us.

The quality of communication within an organization is indicative of its effectiveness. With the implementation of outcomes assessment and program evaluation, institutional research is being used more and more to improve academic programs and institutional processes. Applying institutional research internally requires a structure for disseminating results.

The Institutional Research Portfolio

The Institutional Research Portfolio (IRP) is a three-ring view binder

divided into seven sections. Sections 1 - 3 of the portfolio form an institutional reference and sections 4 - 7 form an outcomes assessment and evaluation reference. College administrators, faculty, and professional staff receive the portfolio from the Office of Institutional Research. Results of institutional research are disseminated to this audience by the Office of Institutional Research throughout the year.

Portfolio Section 1 . The Institutional Research Newsletter

The institutional research newsletter provides an overview of research activities occurring on campus and reports trends in higher education, government, and the economy which impact the institution. The newsletter shows forward progress and a willingness to engage in objective self-study. The newsletter is published and disseminated by the Office of Institutional Research each semester.

Portfolio Section 2 The Institutional Research Newsletter Supplement

The supplement to the institutional research newsletter provides a data-driven perspective on institutional research activities reported by the newsletter. For example, information on student completion rates or enrollment trends may be reported and disseminated by this means. The newsletter supplement is published and disseminated by the Office of Institutional Research depending upon the completion of a research project.

Portfolio Section 3 . The Institutional Factbook

The Institutional Factbook is a reference for institutional planning and reporting. The factbook presents information on the history of the institution, its organization, programs, majors, degrees, human resources, students, finance, physical plant, and alumni. The factbook is published and disseminated by the Office of Institutional Research annually.

Portfolio Section 4: Institutional Outcomes Assessment and Evaluation

Owens Community College has organized its outcomes assessment and evaluation efforts into three levels: institutional, general education, and departmental. The institutional level assessments and evaluation indicate the degree to which the college is meeting the fundamental requirements of its mission including the nine service expectations for Ohio's two-year colleges. Results are published and disseminated by the Office of Institutional Research depending upon the completion of assessment and evaluation projects.

Portfolio Section 5 General Education Outcomes Assessment

Assessment of general education outcomes are those outcomes (i.e. computer literacy) that are deemed important for all students. Results of this assessment help educators plan for curriculum and program improvement. Results are published and disseminated by the Office of Institutional Research depending upon the completion of assessment projects.

Portfolio Section 6 Departmental Outcomes Assessment and Evaluation

Departmental specific assessments and evaluation are those chosen and conducted by the faculty and administration of each department in the college. Results of this assessment and evaluation help departments plan for improvement. These results are not disseminated to the college but are used by

the specific departments. Departments use this portfolio section for their own reference and management purposes.

Portfolio Section 7 Outcomes Assessment and Evaluation Instrumentation

Over the course of assessing and evaluating institutional, general education, and departmental outcomes, several instruments may be developed. This portfolio section provides a means for the Office of Institutional Research to disseminate assessment instruments and/or for departments to catalog their own instruments for future reference.

The Institutional Research Portfolio establishes a means for disseminating institutional research and shows a willingness to openly communicate with the entire college community. The portfolio also stimulates interest and uses for future institutional research projects.

Copies of the Owens Community College Institutional Research Portfolio may be obtained by contacting me: (419) 661-7288.

Derick Kiger
Office of Institutional Research
Owens Community College
Toledo, OH 43699

A Special Invitation From Barbara Valley

The exciting changes in technology and varied methods of students learning are the most exciting experiences we are encountering as we march into the 21st century.

The faculty, staff and administration on the college campus realize the need to retain direction and sequence as everyone, including students, adjusts to the information explosion at our fingertips.

The **OATYC Conference at Clark State in Springfield on October 27, 1995** will explore *Setting New Traditions.*

Bill Bompart, from Agusta College in Georgia, will give us a humorous look at faculty from an administrator's point-of-view.

The fast paced program to follow will introduce a variety of techniques that your collegues across Ohio are eager to share with you.

OATYC Fall Conference Speaker

Dr. Bompart, Vice President of Academic Affairs, Augusta College, Augusta, Georgia, will be the 1995-96 OATYC Fall Conference speaker.

Dr. Bompart, a humorist, has become a much published writer in most educational journals and other publications and a frequent speaker and presenter.

He has a Ph.D. from the University of Texas. Master's of Education from North Texas State University. Bachelor's of Science from the University of Texas.

He is extremely funny, gifted and guaranteed not to bore.

Don't miss him. Plan to attend the Fall OATYC Conference at Clark State Community College, Friday, October 27, 1995.

Albert Salerno, Clark State, Terry Thomas, Ohio Association of Community Colleges and Joseph Mingo, Wright State will inform on where to look for funding in this biennial budget, and how the changes in the legislature will impact on your work in the community college.

At our luncheon there will be lots of wonderful food, as-well-as a myriad of opportunities to interact with collegues from other colleges, and we will honor outstanding teachers and administrators.

Your hosts at Clark State are looking forward to welcoming you to the Performing Arts Center on October 27, 1995. See you there!

FORUM

Issue: Competition or cooperation: Who is in the best position to provide continuing education, two-year colleges or corporations?

A Cooperative Venture

Barb Thompson

At its best, continuing education will be a cooperative venture between corporations and two-year schools, not a competition. By keeping their fingers on the community's pulse, two-year schools can diversify and augment their course offerings to meet the demands of the workplace.

On first consideration, corporations seem ideally suited to provide continuing education. Instruction at the job site seems preferable to wrestling with registering, scheduling, and attending classes at a remote location. Working a class schedule around job hours may be nothing short of a juggling act. Specialized classes are sometimes offered on a limited basis—times that simply do not coincide with one's work schedule. In addition, the equipment and/or resources are available at the job site; the two-year school in question may not be able to provide similar equipment and materials.

But a closer scrutiny of the issue suggests that two-year schools' continued success may rest on their ability to offer diverse programs to those seeking them. If our mission is to serve the community, then we need to address the needs of those already in the work force as well as the needs of those we are preparing for it.

A significant drawback to corporate on-the job training is the expense and time involved. If in-house personnel are not used as trainers, then hiring outside consultants becomes a costly alternative. Also figure slowing or loss of production into the cost. If an employee is spending several hours a week in training, others must cover for him or the work output slides. Taking a class at a local two-year school can be accomplished outside of the company's time. If in-house trainers are used, they have the advantage of familiarity with the environment and equipment. But how well can they teach? The two-year school can offer excellent teaching as well as expertise.

Perhaps the most compelling reason for the two-year school to promote continuing education is the frequency with which employees change jobs and careers. In-house training will enable an employee to fulfill the work demands of that job. But how transferable will these skills be if the employee decides to seek employment elsewhere? If one is trained on Macintosh, and the new position requires IBM experience . . .

The two-year institution can offer a broader-based curriculum. We can work in partnership with business and industry in the form of internships, practicums, on-the job training. A significant number of two-year students have returned to the classroom to upgrade their existing skills, a population that is growing every

year. The two-year school should seize the opportunity to relieve businesses of a burden they are probably only too glad to relinquish.

Barb Thompson
Communication Skills Department
Columbus State Community College
Columbus, OH 43216

Corporations Need an In-House Teaching Staff

Trina E. Steward

When asked who is in the best position to provide continuing education, it would be wonderful to be able to say definitely one or the other. The actual truth is that each provides something the other lacks; therefore, it should be a joining of the two which ultimately provides the employee with the strongest background.

As two-year colleges, we're in the business of teaching and learning. It is our responsibility to present concepts clearly and concisely so that students have a full understanding of the information. The shortcomings arise, however, when in some instances the college provides theory but not a great deal of tactile, practical experience. Depending on the field, instructors may be able to tell the students how things are going out in the work force according to the "latest study," but unless he or she has an actual foothold in that field, the student is receiving a bunch of rhetoric.

At the same time, corporations are approaching everything from a business standpoint. The general mindset is that their employees should come prepared with the necessary knowledge or skills, or they should go outside of the workplace and obtain that knowledge. Corporations often don't realize that they have the wealth of knowledge right there within the walls of the "well oiled machine that is" fill in the blank. Corporations are too busy sending their employees outside of the field to learn the inner workings of the business.

Solution? Corporations should hire teachers, someone who is trained to explain concepts, motivate students, and create an atmosphere for learning. Yes, it's true, many corporations hire trainers to conduct seminars, but these are often people who blindly regurgitate information in an antiseptic, uninspiring way, so that although the material is being given, it's not being received. Corporations should have a full-time teaching staff, a group of people who are active in the field of business, yet are able to teach fellow employees rather than simply dispense information.

Trina E. Steward
Communication Skills Department
Columbus State Community College
Columbus, OH 43216

REACTION

Response to "Diversity in Engineering Technology Curriculum: Networking and Computer Repair"

Ed Bott

The JOURNAL *encourages letters and articles in response to its contents policies, and OATYC activities.*

Today's business and educational sectors are rapidly requiring technical experience from personnel with no technical background. Many employees, which Mr. Craft discovered during his survey, are looking for applicants with both business and technical training. Until recently, the only means of acquiring both of these skills was by obtaining multiple degrees, a deterrent for currently employed individuals, or to already possess experience in one or more of these areas, which is very difficult for high school graduates entering college. As a Networking Engineer with a two-year degree in business, I can attest to the fact that this diversification is very attractive to the business community.

I believe the curriculum which was illustrated by Mr. Craft gives students a very diverse foundation on which to build. Opposed to what many people think, technology is changing but rarely does it change at the base level. Once a good foundation is provided, the technical changes, which ironically the business community dictates, are much more easily learned and implemented. The more difficult task in this type of program will be to educate students on the many facets of the business environment and how to implement this technology to best suit the needs of the business.

A program of this nature should also be examined regularly to determine if modifications to core and non-core curriculum are required. The most effective way of determining these changes is to stay in touch with the source driving the changes, the business. The engineering group from Lima Technical College are obviously on the right track by surveying local businesses to determine their needs. Continuing this means of acquiring data will prove most effective when reviewing courses.

Technology and the changing ways of doing business will not slow. It will only become more important to have this diversification among employees in our work force. With employers becoming more technically aware, the demand for people with solutions or means of finding solutions will be greater in years to come. More diversity among technical and non-technical programs will be what makes two-year colleges standout in the business community.

Ed Bott
Technical Advisory Committee
Lima Technical College
Lima, OH 45804

Dear Dr. Fullen:

I was happy to see an article I co-authored published in the recent OATYC JOURNAL. However, I was surprised to find that my name had not been printed alongside. I am confident that you will take corrective action regarding this matter.

Darius Rastomji
Associate Professor
Computer Programming
The University of Akron
Community and Technical College
Akron, OH 44325

Dear Darius:

The *Journal* extends its apologies to you and, for you, reprints the first page with your name for your records.

Respectfully,
Jim Fullen, Editor

Tech Prep: An Educational Option for Success

Valerie Frear and Darius Rastomji

Why Tech Prep ?:

According to the vision statement for Tech Prep as defined in the Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990, the term "Tech Prep" means a combined secondary and post-secondary program that leads to an associate degree or certificate culminating in meaningful employment within an area of specialization. Tech Prep programs integrate academics with occupational courses, relating to meaningful work-related experience for the students (Trotter "Coal Miner's Daughter." *The Executive Educator* February 1994).

The global economy affects the careers of all employees in one form or another. Company restructuring has led employees to question the stability of the work environment. With job security on the decline, workers need to take control of their careers by making certain that they adapt to the latest state-of-the-art technology. Susan Dentzer, in *U.S. News and World Report* 21 September 1992, indicated that figuring out how to prepare workers for the next century could turn out to be one of the toughest tasks that American firms face. Companies strive to maintain their competitive edge by investing in the latest technologies. Technical, analytical and commercial skills will be needed by workers in order to be part of a highly skilled and technologically changing job market. Students graduating from high schools and colleges need to be prepared to deal with technological changes with ease and flexibility. Entering the work force with a broad range of skills will undoubtedly give the student a competitive edge. Not only do students need to invest in themselves, but so do educational institutions and industry. To achieve the goal of creating an increasingly highly educated and qualified workforce, certain educators have designed a model in which business/industry, community organizations and secondary/post-secondary institutions have come together in planning, developing and implementing "Tech Prep" programs.

REVIEW

Am I My Brother's Keeper?

Roy Bentley

The "Review" section is a brand new one, requested at the 1994 OATYC Fall Conference. Its purpose is to summarize and evaluate the contents of any recent book, either written by a two-year college teacher or administrator or a book pertaining the two-year college. Review of Chief: The Life History of Eugene Delorme, Imprisoned Santee Sioux, *edited by Inez Cardozo-Freeman (Lincoln: University of Nebraska Press, 1994). Inez teaches at the Ohio State University-Newark Campus.*

That we are all responsible, individually, for our actions is not only the foundation for law but for any sort of human interaction. Reciprocity, a tit-for-tat exchange psychology, is then the root of meaningful and civilized living. This and whatever guilt may attend and shepherd behavior are all sadly lacking in Eugene Delorme, if not lacking then they have been rechanneled into that most American of pasttimes: blaming someone else. Certainly a kind of "jail think" is common enough in penitentiaries and other correctional institutions, but what Inez Cardozo-Freeman does in allowing Eugene Delorme, "an imprisoned Santee Sioux," free reign in telling his story is to let us overhear the revisionist thinking of a remorseless criminal. Delorme is a victim, all right - a victim of the treadmill of his own thinking...

At the outset of this amazing narrative, that was my thinking. The beauty and strength of what the editor and author have brought to life is that the story forces you to face the question, Why am I unimpressed by all this suffering? In that wrestling emerges a form of compassion which is a impatient with the collective failures surrounding a life as the individual equivocations attending the road to a failed life deserving of so much more, particularly in America in the Twentieth Century. A little "Christian" compassion is what Delorme hopes for - or a compassion so inter-denominationally upwelling as to earn the distinction of "human kindness." He gets what he gets, primarily, in the change to tell his side of the story - his father's alcoholism, his mother's understandable absences as she worked two jobs, his early enduring of schoolyard racism, his institutional nightmares.

> Recess was a goddam terror, see, it was like a halfhour of terror for me 'cause they wouldn't let me play no games, they wouldn't let me swing on the swings. I had to go stand by a goddam nun just for protection...

He then tells of "making a plan" with his brother. The plan involved a pair of samurai swords the two boys had secreted into some bushes by the playground's edge. When the swords are retrieved, we see an acting out of a child's need for empowerment. ...

> We go to the head of the fucking playground yard, and we grab our swords. Man, did we kick ass! We terrorized them motherfucking nuns, we terrorized them fucking kids, and they're *lucky*, lucky we didn't cut a motherfucking head off, 'cause I was sure trying!

It should be stated, early on, that at no time does the editor of the narrator believe this act heroic; rather, this is in explanation for what follows - years of thievery and all manner of rebellion, incarceration and serial brushes with the legal system, car theft when the driver "would have to be sitting on a pillow." Eugene Delorme is not unique, in that cruelty and neglect subtract so from the quality of his life; instead, it is the particularity of his experience which so brings to life the general plight of millions similarly short-changed and disenfranchised. He stands out by virtue of standing for a type, on one level. But the real strength comes, again, in his invitation to follow him through a series of failures, a chain of abuses and even a failure among the Indians Gene encounters early in life to accept "light hair and green eyes" as Indian.

After the stint at Indian school, Gene's mother moves the family to Tacoma. At twelve, Gene begins - or, rather, continues his life "outside the law." We are witness to an escape from a state juvenile facility and a high-speed chase ending in recapture in Seattle and a return to the juvenile facility followed by a release to the custody of his mother. Gene is anything but typical but his need to confess, in the form of the narrative Cardozo Freeman midwives into being, speaks to some unquenchable expectation of a better way: "You just kind of keep track of it. I keep track. I keep score...." And it is this sort of "keeping score" that goes to the heart of who this man is and, by extension, we all are. We all keep score - the rich and poor, abused and abuser, cop and robber. The real score is, always, that we are fortunate to get our share. Those who don't, like Gene, generally are very much aware of that deficit.

This book is important not only for continuing the dialogue on compassion, but for its thoroughly particular voice. Gene Delorme is not so unique and he is presented without apology. That is Inez Cardozo-Freeman's gift - to let the man tell his own story. She shows incredible restraint. Because of her efforts we see what has been called "The Other American." The picture is not a pretty one. It is, however, important that we take a good look.

Roy Bentley
Former Instructor
General Studies
Central Ohio Technical College
Newark, OH 43055

The Editorial Board of the OATYC Journal *is soliciting written responses (three or four paragraphs) to the question:* ***ISSUE: To what extent should two-year colleges utilize the internet as an instructional and marketing tool?*** *The response should address one of the many possible perspectives. Here is your chance to participate, and the Board encourages you to do so. As determined by the Board, the best responses will be published in the next edition's "Forum" section,* **deadline: March 15, 1996.**

The Jerry McClain Co., Inc.

Custom homes, Northern Products log homes, residential remodeling, light commercial construction and residential and commercial condominums.

Design – Quality – Service

51 North Third Street
Suite 701
Newark, OH 43055

Phone
(614) 345-3700

Sharon Valley Apartments

"Designed with the student in mind"

Sharon Valley Apartments are located adjacent to the campus of The Ohio State University, Newark and the Central Ohio Technical College.

Phone
(614) 366-9430

OATYC Journal Campus Solicitors

Belmont State Community College, Rusty Stevens
Bowling Green State University, Firelands Branch, Robin Garland

Central Ohio Technical College, Scott Wilson
Cincinnati State Community and Technical College, Jim Marcotte
Clark State Community College, Barbara Valley
Columbus State Community College, Rita Bova
Cuyahoga Community College East, Thomas Morris
Cuyahoga Community College Metro, Stanley Klosek
Cuyahoga Community College West, Arthur Polen

Edison State Community College, Linda Vereyles

Hocking College, [redacted]

Kent State University, Ashtabula Campus, Harold Darlymple
Kent State University, East Liverpool Campus, Kevin Edwards
Kent State University, Geauga Campus, Janet Paxton
Kent State University, Salem Campus, James Cooney
Kent State University, Stark County Campus, Judy Ohles
Kent State University, Tuscarawas Campus, Agnes K. Swigart
Kent State University, Trumbull Campus, Janet Crawford

Lakeland Community College, Sig Sugg
Lima Technical College, Will Wells
Lorain County Community College, Marilyn Valentino

Marion Technical College, [redacted]
Miami University, Hamilton Campus, Robert Baer
Miami University, Middletown Campus, Robert Speckert
Muskingum Area Technical College, Cherie White

North Central Technical College, Bruce Sliney
Northwest State Community College, James Nagel

Ohio State University, Agricultural Technical Institute, Linda Houston

Ohio State University, Lima Campus, John Fallon
Ohio State University, Newark Campus, Robert Klingensmith
Ohio University, Belmont Campus, Thomas Flynn
Ohio University, Chillicothe Campus, J. Steven Phillips
Owens State Community College, Gary Bazer

Raymond Walters General and Technical College, James E. Cebula
Rio Grande Community College, Vickie Crabtree

Sinclair Community College, Benjamin McKeever
Southern State Community College, Kenneth Store
Stark Technical College, Thenice Gall

Terra State Community College, Roger Bober
Toledo Community and Technical College, Judy Hannekan

The University of Akron Community and Technical College, Anna Maria Barnum
The University of Akron, Wayne College, Robert McElwee
University of Cincinnati Clermont College, Karen Williams
University Of Cincinnati College of Applied Science, Frederick Krynan
University of Cincinnati University College, Marilyn Smith

Washington State Community College, Arthur Molitierno

Youngstown State College of Health and Human Services, Robert Campbell

72 BEST COPY AVAILABLE

OATYC Officers: 1994-95

President: Marilyn Valention, Assistant Professor of Arts and Sciences, Lorain County Community College, 1005 North Abbe Road, Elyria, OH 44035 (216) 365-4191.

President-Elect: Barbara Valley, Associate Professor of Nursing, Clark State Community College, 570 East Leffel Lane, Springfield, OH 45505-4795 (513) 328-6109.

Treasurer: Russell K. Davis, III, Associate Professor of Business Management Technology, University of Akron, Community and Technical College, 304 East Buchtel Avenue, Akron, OH 44235 (216) 972-7391.

Secretary: John Fallon, Assistant Professor of Arts and Sciences, Lima Technical College, 4240 Campus Drive, Lima, OH 45804 (419) 221-1112.

Past President: Carol Nelson-Burns, Assistant Professor of General Studies, University of Toledo/C&T College, Scott Park Campus, Toledo, OH 43606 (419) 537-3318.

Board of Directors: 1994-95

Thomas Preisser, Professor of Philosophy, Sinclair Community College, 444 West Third Street, Dayton, OH 45402-1453 (513) 226-2500.

Ray McBeth, Professor of Humanities, Wayne College, University of Akron, 10470 Smucker Road, Orrville, OH 44667-9757 (513) 226-2500.

Carolyn McCluskey, Associate Professor of Business Technology, Jefferson Technical College, 4000 Sunset Boulevard, Steubenville, OH 43952-3594 (614) 264-5591.

OATYC CAMPUS LIAISON LIST - 1994-95

Belmont State Community College
Rusty Stevens
(614) 695-9500

Bowling Green State University-Firelands
Robin Garland
(419) 433-5560

Central Ohio Technical College
Scott Wilson
(614) 366-1351

Cincinnati State Technical & Community College
Jim Marcotte
(513) 569-1618

Clark State Community College
Barbara Valley
(513) 325-0691

Columbus State Community College
Shirley Palumbo
(614) 227-2453

Cuyahoga Community College-Career Resources Institute
Allie Dunham
(216) 987-4048

Cuyahoga Community College-Eastern
Dave Humphreys
(216) 987-6000

Cuyahoga Community College-Metro
Nancy Roberts-Harrington
(216) 987-4000

Cuyahoga Community College-Western
G. Paul Kemp
(216) 987-5000

Edison State Community College
Linda Verceles
(513) 778-8600

Hocking College
Elaine Dabelko
(614) 753-3591

Jefferson State Community College
Carolyn McCluskey
(614) 264-5591

Kent State University-Ashtabula
John Mahon
(216) 964-3322

Kent State University-East Liverpool
Kevin Edwards
(216) 385-3805

Kent State University-Geauga
Janet Paxton
(216) 285-2219

Kent State University-Salem
Ted Shura
(216) 332-0361

Kent State University-Stark
William Bittle
(216) 499-9600

Kent State University-Trumbull
Janet Crawford
(216) 847-0571

Kent State University-Tuscarawas
Agnes Swigart
(216) 339-3391

Lakeland Community College
Sig Sugg
(216) 953-7342

Lima Technical College
John Fallon
(419) 221-1112

Lorain County Community College
Lou Saurez
(216) 365-4191

Marion Technical College
Nancy Gilson
(614) 389-4636

Miami University-Hamilton
Robert Baer
(513) 863-8833

Miami University-Middletown
Rob Speckert
(513) 424-4444

Muskingum Area Technical College
Cherie White
(614) 454-2501

North Central Technical College
Bruce Sliney
(419) 755-4800

Northwest State Community College
James Nagel
(419) 267-5511

Ohio State University Agricultural Technical Institute
Linda Houston
(216) 264-3911

Ohio State University-Lima
Violet Meek
(419) 221-1112

Ohio State University-Mansfield
Ted Dolstream
(419) 755-4011

Ohio State University-Marion
Lynn Corbin
(614) 389-2361

Ohio State University-Newark
Robert Klingensmith
(614) 366-3321

Ohio University-Eastern
James W. Newton
(614) 695-1720

Ohio University-Chillicothe
J. Steven Phillips
(614) 775-8500

Ohio University-Ironton
Eric Cunningham
(614) 533-4600

Ohio University-Lancaster
Charles Bird
(614) 654-6711

Ohio University-Zanesville
Craig Laubenthal
(614) 654-6711

Owens State Community College
Gerry Bazer
(419) 661-7520

Raymond Walters General Technical
Larry Waldrop
(513) 745-5698

Rio Grande Community College
Vickie Crabtree
(614) 245-5353

Sinclair Community College
Thomas M. Preisser
(513) 226-2500

Southern State Community College
Don Storer
(513) 393-3431

Stark Technical College
John Thornton
(216) 494-6170

Terra State Community College
Robert P. Bober
(419) 334-3886

University of Akron, Community and Technical College
Russ Davis
(216) 375-7220

University of Akron, Wayne College
Ray McBeth
(216) 684-8945

University of Cincinnati College of Applied Science
Frederick Krynan
(513) 556-6567

University of Cincinnati, Clermont College
Roger J. Barry
(513) 732-2960

University of Cincinnati University College
Marylyn Smith
(513) 556-1667

University of Toledo Community and Technical College
Judy Hanneken
(419) 537-3126

Washington State Community College
Peggy Peterson
(614) 374-8716

Wright State University-Lake Campus
Arthur Molitierno
(419) 586-2365

Youngstown State University
Robert Campbell
(216) 742-3888

OATYC
JOURNAL

Jim Fullen, Editor
Ohio Association of Two-Year Colleges
Central Ohio Technical College
University Drive
Newark, OH 43055, (614) 366-9289

NON-PROFIT ORG.
U.S. POSTAGE
PAID
PERMIT NO. 52
NEWARK, OHIO.

Ohio Association of Two-Year Colleges

An affiliate of the American Association of Community Colleges

Vol. XX No. 2 Spring 1996

THIS ISSUE:

COMMENT

An Interesting Year, Barbara S. Valley, OATYC President, Clark State Community College

TEXT

FOCUS: *The Ohio State University at Mansfield: A Solid Institution of Higher Learning*, Rodger Smith and Beth Enders, Ohio State University at Mansfield . . .

Teaching and the Electric Current, Kent L. Zimmerman, Sinclair Community College

Tech Prep—One Year Later, Darius Rastomji and Valerie Frear, University of Akron Community and Technical College

The Clermont County Distance Learning Network, Patricia E. Friel, University of Cincinnati, Clermont College

PLUS ONE

Grammar Making a Comeback, Bill McCleary, SUNY College at Cortland

PRACTICUM

Business Management Shadowing Experience, Thomas E. Marshall, Owens Community College

FORUM

ISSUE: To what extent should two-year colleges utilize the internet as an instructional and marketing tool?

Lincoln's Legs & Electric Links, David Humphreys, Cuyahoga Community College

The Internet: A Broadening Experience, Thomas Bowman, Ohio State Agricultural Technical Institute

REACTION

Response to "The Simultaneous Teaching of Accounting and Economics to the Two-Year Student"
Frank Lemmings, Ohio State Agricultural Technical Institute

OATYC JOURNAL

BEST COPY AVAILABLE

OATYC

Provides:

- Collective influence on the future direction of Ohio's two-year campus system;
- Access to classroom liability insurance protection of $1,000,000;
- An open forum for the discussion of trends, problems, accomplishments, and challenges unique to state assisted two-year campuses;
- A newsletter which informs members of the proceedings and activities of the OATYC and of Ohio's two-year campuses;
- The *Journal* which provides an opportunity for publication and exchange of scholarly views and concepts;
- Conference and workshops providing opportunities for professional development, visits to other two-year campuses, presentation of papers, and socialization with other two-year campus personnel;
- Affiliation with the American Association of Community Colleges and its activities throughout the nation.

Purposes:

- To provide a forum in which all state-assisted two-year campuses can meet to discuss and resolve mutual problems;
- To foster cooperation and communication among Ohio's institutions of higher education;
- To provide the viewpoint of the state assisted two-year campuses to the Ohio Board of Regents and to the State Legislature;
- To identify and improve the status, prestige, and welfare of all state-assisted two-year campuses in Ohio;
- To cooperate with other Ohio agencies, colleges, and universities in research and activities that promote the effectiveness of higher education in Ohio;
- To increase the contribution of the state-assisted two-year colleges to the total educational process in the state of Ohio.

Institutional Members

Belmont Technical College
Wes Channell, President
Bowling Green State University
Firelands Campus
Robert DeBard, Dean
Clark State Community College
Albert A. Salerno, President
Columbus State Community College
Marvin G. Sutler, Interim President
Cuyahoga Community College,
Jerry Sue Thornton, President
Edison State Community College
Kenneth Jowell, President
Hocking College
John J. Light, President
Jefferson Community College
Edward L. Florak, President
Kent State University
Ashtabula Campus
John Mahan, Dean
Kent State University
Tuscarawaras Campus
Gregg Andrews, Dean
Lakeland Community College
Ralph R. Doty, President
Lima Technical College
James J. Countryman, President
Lorain County Community College,
Roy Church, President
Marion Technical College
J. Richard Bryson, President
Miami University
Hamilton Campus
Jack Rhodes, Dean
Miami University
Middletown Campus
Michael Governanti, Executive Director
Muskingum Area Technical College
Lynn H. Willett, President
North Central Technical College
Bryon E. Key, President
Northwest State Community College
Larry G. McDougle, President
Ohio State Agricultural Technical Institute
William Anderson, Director
Ohio State University
Lima Campus
Violet Merk, Dean
Ohio University
Chillicothe Campus
Delbert E. Myer, Dean
Ohio University
Eastern Campus
James Newton, Dean
Ohio University
Lancaster Campus
Charles Bird, Dean
Owens State Community College,
Daniel Brown, President
Rio Grande Community College,
Barry Dorsey, President
Sinclair Community College
David H. Pontiz, President
Southern State Community College
George McCormick, President
Stark Technical College
John J. McGrath, President
Terra State Community College,
Chanslette Lee, President
The University of Akron,
Community & Technical College
Deborah S. Weber, Interim Dean
University of Akron, Wayne College
Robert McElwee, Dean
University of Cincinnati
Clermont Campus
Roger Barry, Dean
University of Cincinnati,
OMI College of Applied Science
Fredrick Kayman, Dean
University of Cincinnati,
Raymond Walters College
Barbara Barden, Dean
University of Toledo,
Community & Technical College
Mary Ellen Edwards, Dean
Washington State Community College
Carson Miller, President
Wright State University, Lake Campus
Greg Schutten, Dean

JOURNAL

OF THE

Ohio Association of Two-Year Colleges

(Affiliate of the American Association of Community Colleges)

VOL. XX NO. 2 Spring 1996

The *Journal of The Ohio Association of Two-Year Colleges* is published by the Association to provide the two-year colleges of Ohio with a medium for the sharing of concepts, methods and findings relevant to the two-year college classroom and to provide an open forum for problem discussion and review.

Subscription is part of the OATYC active, associate, or institutional membership. However, single copies of the *Journal* are available at $3 each. A yearly subscription is available for $6 to persons or organizations who do not want membership in the OATYC. Postage is prepaid on all orders within the U.S.; $.50 per year is added for Canada, $1 per year for all other foreign countries. Communications regarding orders, special subscriptions, single copies, advertising, and permission to reprint are to be addressed to:

The Ohio Association of Two-Year Colleges
c/o Russell K. Davis, III
University of Akron Community and Technical College
Polsky M169
Akron, OH 44325-6002

Journal Officers
Linda Houston, Editor, The Ohio State Agricultural Technical Institute
David Humphreys, Assistant Editor, Cuyahoga Community College Eastern Campus

Editorial Board
Anna Maria Barnum, University of Akron Community and Technical College
Marc Green, Cincinnati Technical College
Judy Hanneken, Community and Technical College, University of Toledo

Readers
John Fallon, Lima Technical College
Judith 'Jay' Wootten, Kent State - Salem
Shirley Lunsford, Ohio State Agricultural Technical Institute
Allen Zimmerman, Ohio State Agricultural Technical Institute

OATYC Journal, Spring 1996
Table of Contents

COMMENT

An Interesting Year,
Barbara S. Valley, OATYC President, Clark State Community College 3

TEXT

FOCUS: *The Ohio State University at Mansfield: A Solid Institution of Higher Learning,*
Rodger Smith and Beth Enders, Ohio State University at Mansfield 6

Teaching and the Electric Current,
Kent L. Zimmerman, Sinclair Community College 16

Tech Prep—One Year Later,
Darius Rastomji and Valerie Frear, University of Akron Community and Technical College 18

The Clermont County Distance Learning Network,
Patricia E. Friel, University of Cincinnati: Clermont College 21

PLUS ONE

Grammar Making a Comeback,
Bill McCleary, SUNY College at Cortland 27

PRACTICUM

Business Management Shadowing Experience,
Thomas E. Marshall, Owens Community College 31

FORUM

ISSUE: To what extent should two-year colleges utilize the internet as an instructional and marketing tool?

Lincoln's Legs to 'Lectric Links, David Humphreys, Cuyahoga Community College 34

The Internet: A Broadening Experience,
Thomas Bowman, Ohio State Agricultural Technical Institute 36

REACTION

Response to "The Simultaneous Teaching of Accounting and Economics to the Two-Year Student," Frank Jennings, Ohio State Agricultural Technical Institute 37

COMMENT

An Interesting Year

Barbara S. Valley

This has been an interesting year, indeed. The winter has been a challenge. It is a tribute to the dedicated staff and faculty of the community colleges across Ohio that classes have continued to meet, and students have been able to accomplish their educational goals despite ice, snow, and wind chills well below zero degrees.

Barbara S. Valley

The State Retirement Systems have been able to implement changes to strengthen the financial base without putting our retired brethren at more risk. We still need to watch what Bills are introduced in the legislature and make our voices heard individually and collectively.

I hope you will take time this summer and fall to meet and talk with those people running for office so they know what you expect from your elected officials.

The United States has another opportunity, at the Summer Olympics in Atlanta, to show the world that we are able to put differences aside and support young people in their endeavors to excel on the summer playing fields.

Carolyn McClusky and her committees at Jefferson Community College are hard at work planning for the Fall Conference on October 25, 1996, in Steubenville. Now is the time to send your proposals for presentation. We are looking forward to meeting and talking with you at Jefferson Community College in October.

Finally, this is a bittersweet time for OATYC Journal. Jim Fullen, our editor for these many 21 years, is retiring at the end of this term. Jim has been our guiding light and has set a standard of excellence by which other journals have been measured. We will miss you, Jim, and wish you well.

Our new editor is Linda Houston at Ohio State Agricultural Technical Institute. She has been working closely with Jim Fullen for the past year so the transition will be smooth. Linda is planning some interesting innovations which you will be seeing and hearing about from your OATYC liaison in the near future. Plan now to visit the OATYC Journal table at the Fall Conference at Jefferson Community College on October, 25, 1996, to meet Linda and her staff.

See you in Steubenville in October.

Barbara S. Valley
OATYC President
Clark State Community College
570 East Leffel Lane
Springfield, OH 45501

INFORMATION FOR PROSPECTIVE CONTRIBUTORS

The *Journal* encourages submission of material for any of its sections by faculty, staff, administrators and trustees of any of Ohio's community, general and technical, junior, regional and technical campuses. The *Journal* is particularly receptive to articles of general professional importance in the areas of administration, instruction and baccalaureate or technical studies for two-year institutions.

There are forty-four solicitors of editorial material listed here. Contact your campus solicitor or one nearest you to inquire about submitting a specific manuscript.

Manuscripts must be typed, double-spaced and of approximately 1,000-3,000 words in length. All submissions must be accompanied by a stamped, self-addressed envelope for return. Art work must be black and white and camera ready. Photos glossy; tables and drawings on 8 ½ by 11 paper, and camera ready. The name and address of the contributor should be on the back of all art copy. In-text documents should be MLA or APA. Each submission should have a cover page with the name of the article and the name of the author.

Editorial Policy

The *Journal* is not responsible for manuscripts or materials lost in mailing nor is it responsible for returning items not accompanied by a stamped, self-addressed envelope.

The *Journal* reserves the right to edit manuscripts to meet its needs and objectives. Where major revisions are necessary, every effort will be made to clear the changes with the author.

Submission deadline for the next *Journal* is August 1, 1996.

JOIN

OATYC

OATYC Application for Membership

❒ I am enclosing $25 for regular membership dues for 1995-96.
❒ New Member
❒ Membership Renewal

College Address _____

Name _____
Please Print

Title/Speciality _____

Two-Year Campus _____

City _____ State _____ Zip _____

C/O Russell K. Davis, III. University of Akron, Community and Technical College, Polsky M169, Akron OH 44325-6002.

Professional Liability Protection Plan for Educators

Offered to Employees of OATYC/AACC Member Colleges

OATYC
AACC

The Educators Professional Liability Plan covers the acts or omissions of the enrollee and protects the enroller for the acts of anyone under his or her supervision. This Plan also assists the enrollee to protect his or her job.

1. Your choice of $500,000 or $1,000,000 in protection. Defense costs are paid in addition to this amount. This amount is for all claims during the Plan year. If you supervise other employees and are sued by one of them, the Plan provides 90% or $2,500, whichever is less, for defense costs ($100 deductible to be paid by you). The maximum $500,000, or $1,000,000 amount still applies to damages.

2. The Plan provides protection against claims under the following provisions:
   - The occurrences take place on or after the effective date of the policy;
   - The claim, or written notification of circumstances which could reasonably give rise to a claim, is first made by or against the insured during the agreement period or within 60 days after expiration or termination of the agreement.

3. The Plan will pay up to $50 for your initial consultation with an attorney and it will pay up to $250 of the cost of having an attorney represent you at a formal hearing of a school board or other authority if you are threatened with termination, reassignment or demotion. You will also receive up to $250 for legal fees, subject to a $100 deductible, if you decide to sue.

NOTE: Members whose primary employment is with an educational organization may cover part-time educational jobs (consultant, tutor, teacher) by paying an additional $40 for the $500,000 benefit or $70 for the $1,000,000 benefit.

PROFESSIONAL LIABILITY PLAN ENROLLMENT FORM

A special Membership Services Plan of Ohio Association of Two-Year Colleges; American Association of Community Colleges

Name _____

Institution _____

Address _____

City _____

State, Zip _____

Birth Date _____ Social Security No. _____

Date Signature _____

Regular Coverage – $500,000/$500,000
Coverage @ $40 per year ..... ☐

Including Part-time private Consultants $500,000/$500,000 Coverage @ $80 per year ..... ☐

Regular coverage – $1,000,000/ $1,000,000 Coverage @ $70 per year ..... ☐

Including part-time private consultants $1,000,000/$1,000,000 Coverage @ $140 per year ..... ☐

Coverage becomes effective the first of the month following receipt of enrollment form and payment in full mailed to office designated on the back of this form. Please do not mail this form if you are currently insured by this plan, you will automatically receive a renewal notice. Coverage extends for a full 12 months. Send your enrollment form and check payable to: Forrest T. Jones and Company, Inc., P.O. Box 418131-3130 Broadway, Kansas City, MO 64141-9131. Phone: 1-800-821-7303.

TEXT

FOCUS: The Ohio State University at Mansfield — A Solid Institution of Higher Learning

Rodger Smith and Beth Enders

In this edition, Rodger Smith and Beth Enders lead us on a visit to the Ohio State University at Mansfield. Nestled within 500 beautifully wooded acres five miles northwest of Mansfield, the campus affords students the chance to attend Ohio State in a unique setting — with small classes, a learned faculty and access to world-class resources.

INTRODUCTION

For more than a quarter century, The Ohio State University at Mansfield has provided the citizens of north central Ohio with the opportunity to pursue academic studies at one of the nation's foremost Universities.

HISTORY

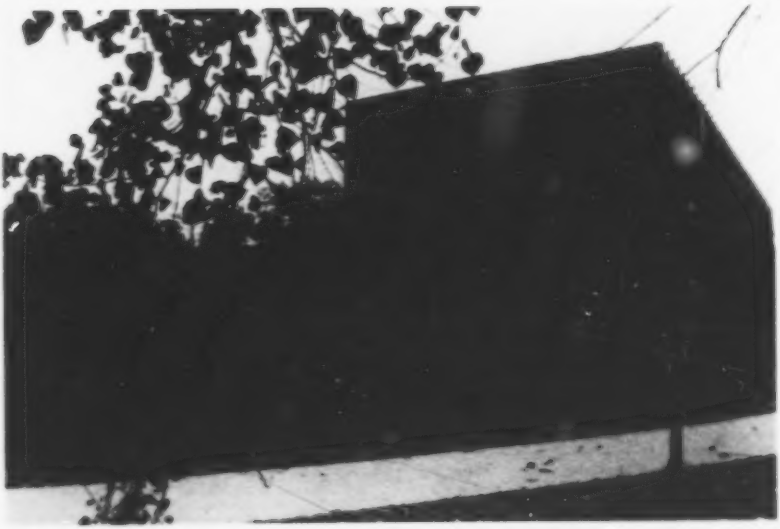
The campus of The Ohio State University at Mansfield was dedicated on October 1, 1966 and opened for classes on the following day. The occasion marked the birth of an important community asset in north central Ohio.

The Ohio State University at Mansfield predates the opening of the campus site by seven years. At the invitation of the greater Mansfield area community, OSU classes were offered beginning in 1958 at Mansfield Senior High School. The people of north central Ohio had taken the first step in fulfilling the need for quality higher education in this major industrial and business community.

The success of the endeavor was recognized during the 1960's when the Ohio Board of Regents designated Mansfield as an official site for a regional campus of The Ohio State University. With that decision, local citizens headed a land acquisition fund drive with a target of $350,000. The community overwhelmingly responded with donations totaling more than $600,000. The surplus was placed in the hands of the Mansfield University Foundation to support scholarships and other special campus needs.

Construction of the campus began on a 600-acre site which was acquired and deeded to OSU by 1965. Less than a year later the first building, Ovalwood Hall, was dedicated and opened for classes in October of 1966, offering 87,500 square feet of space. The second major building, Eisenhower Memorial Center, was opened in 1968 as a library and cafeteria.

The educational programs in these early years met the Master Plan for Higher Education in the State of Ohio. OSU Mansfield had been designated to serve the mission of providing lower division (freshman, sophomore) instruction with wide breadth for students planning to complete a baccalaureate degree. In 1972 the campus expanded its mission by offering a bachelor's degree in elementary education and by increasing educational services for adults. Further offerings included selected courses at the upper-division (junior, senior) and graduate levels to serve identifiable community educational needs.



Ovalwood Hall, the first building constructed at the campus

The University entered into an agreement with the Ohio Board of Regents in 1969 to house the North Central Technical Institute, now the North Central Technical College. In addition to sharing its buildings and library with NCTC, the University contracted to erect a separate laboratory facility for technical courses and to provide administrative and program support. Construction of the Technical Education Center was completed in 1970.

Bromfield Hall, completed in 1976, houses the library and learning resources center as well as laboratories, classrooms and faculty offices. In 1977 the Physical Activities Center was opened for physical education, recreation and intramural use. The Schuttera Service Center was dedicated in 1985 as the maintenance plant.

In 1980, the Ohio Board of Regents approved the awarding of the Associate of Arts degree by OSU Mansfield. The two-year degree provides for flexible course scheduling, individual academic planning, and may later be applied toward a four-year baccalaureate program.

On Oct. 5, 1986, the OSU Mansfield campus held the official ground-breaking ceremony for The Pearl Conard Gallery, which adjoins Ovalwood Hall. The $293,000 construction cost was funded by a generous gift from the John and Pearl Conard Foundation of Mansfield. At the same time OSU Mansfield rededicated Ovalwood Hall and formally named the auditorium wing the Founders Auditorium.

Thirty years ago Dick Collier of the *Mansfield News Journal* probably said it best when he wrote these words: *" OSU Mansfield is a living symbol of faith in the young men and women who will learn here how to serve themselves and their neighbors in a better way than they might ever have done without it. It's a stake in the future. It's a pledge for the best. "*

ACADEMIC PROGRAM

The Mansfield Campus is an integral part of The Ohio State University. The courses are the same as those offered at the Columbus campus, and all academic credits earned at the Mansfield campus count completely toward a degree from Ohio State. Courses taken and credits earned at the Mansfield campus simply reflect a student's decision to attend Ohio State in a location other than Columbus.

Many students attend the Mansfield campus intending to transfer general education course credits elsewhere, in most cases to the Columbus campus. Other students are interested in completing as much of their bachelor's degree as possible without leaving the campus. Those students will find that they can complete the degree requirements in Elementary Education, Psychology and English entirely at the Mansfield campus, without having to transfer. In addition, almost all of the courses necessary to complete a degree in Business, Sociology and Criminology are offered at the campus.

For students interested in graduate studies, the Mansfield campus offers master's degree programs in Elementary Education and Social Work.

BOARD OF TRUSTEES

In 1994, The Ohio State University Board of Trustees established separate governing entities at each of its regional campuses. The eleven-member Mansfield Board of Trustees was formed on June 4 of that year.

The Board advises and assists the Dean/Director in the administration of the Mansfield campus. Through monthly meetings, the Board advises on the educational needs of the service area, participates in the strategic planning process for the campus, and provides recommendations with respect to current funds and capital budgets. Trustees serve a term of three years without compensation.

Bromfield Hall houses the library, the Center for Academic Enrichment, laboratories, and some faculty offices.

Associate professor of music, Mark Ellis, teaches a music class

FACULTY

The strength of the Mansfield campus is its faculty. Coming to the campus from some of the nation's most prestigious universities, over 90% of the faculty hold Ph.D's.

The faculty hold something else: a commitment to teaching undergraduate students. And although the faculty are excellent teachers, they are also active researchers who regard teaching and research to be complementary activities. Their quest to create and share knowledge ensures that they are at the leading edge in their disciplines.

The Mansfield campus holds the distinction of having five faculty members who have been named winners of the OSU Alumni Award for Distinguished Teaching. The university-wide award recognizes faculty for superior teaching and serves as encouragement for teaching excellence. The achievements of these faculty reflect the quality of instruction on the campus as a whole.

STUDENTS

OSU Mansfield draws students from nearly 30 area high schools, as well as transfer students from colleges throughout the country. In addition, nearly a third of the students are "non-traditional"—adults over the age of 24 pursuing higher education for personal or career-related reasons. This blend of traditional college age students and those with rich life experiences fosters an atmosphere in which ideas are freely exchanged, fully explored, and respectfully challenged from a variety of perspectives.

HONORS PROGRAM

Students scoring 26 and above on the ACT Composite are eligible to participate in the Honors Program. Students are able to schedule honors courses

and to participate in the co-curricular activities of the program. Students are also given priority in scheduling courses each quarter, diminishing the possibility of being closed out of courses.

To remain in the program, students are expected to schedule honors courses and "honors equivalent" courses when appropriate and feasible. They must also participate at a satisfactory level in the co-curricular activities of the Honors Program and maintain a cumulative GPA of 3.5 or higher. All honors students are reviewed annually at the end of Spring Quarter to determine their status. The Honors Committee, consisting of the associate dean, faculty members and an academic advisor, choose each quarter's activities. The associate dean then decides what courses will be offered.

The courses are small, with no more than 15 students, and are designed and formatted for maximum participation and interaction between students and professor. At least one honors course is offered each quarter.

Eisenhower Hall, current home of the Office of Student Activities and the cafeteria

THE OFFICE OF CAREER SERVICES

The Office of Career Services has designed a program to help students gather and interpret information about themselves and the world of work. The approach uses career assessment inventories, specifically the Strong Interest Inventory, The Myers-Briggs Type Indicator and SIGI Plus, a computerized career guidance system. Working with the Coordinator of Career Services, students receive guidance and interpretation of these instruments.

In addition to individual consultations, students obtain information through resources such as the Professional Careers Series and the National Association of Colleges and Employers publication. The career library also contains

One of the beautiful views on campus

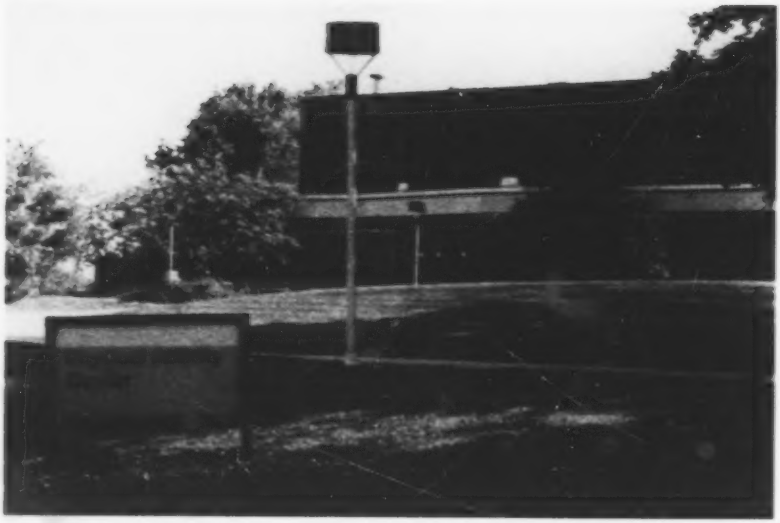
information to help students explore graduate schools and research area companies through employer files containing company literature.

Workshops on resume writing and preparing to interview are offered along with job search assistance, cooperative education experience, and assistance in seeking full-time and part-time employment. The office also participates in an annual job fair.

STUDENT ACTIVITIES

The Office of Student Activities supports academics by involving students in the daily life of the University. Although student interests have varied throughout the years, a wide range of co-curricular activities has contributed to the college experience. Since 1966, students have actively participated in many aspects of student life.

The theatre and music departments have been very active producing a minimum of six events per year. Occasionally the departments have jointly staged exciting dinner theatre productions reviewed as "professionally done



The Physical Activity Center where students enjoy recreational pursuits

with amateurs." Theatre tours to New York City and Stratford, Canada have been scheduled regularly. OSU-M has the only chapter of Theta Alpha Phi (national honorary theatre fraternity) on a two-year campus.

An OSU-M student reviewing books in the library

The Arts and Lecture Series has showcased nationally known guest artists and speakers, including William F. Buckley, Paul Ehrlich, George Gallup, Steward Udall, Eugene List and Jean-Michel Cousteau. One lecture event, "Life After Life" by Raymond Moddy, drew an overwhelming crowd of 1,200 to the Physical Activity Center in 1977.

An array of student publications has existed over the years, including The Option, The Sentry and The Purple Page.

Over the years, dances with popular live bands and unique themes have drawn hundreds of students to the Eisenhower Memorial Center. May Daze activities celebrate the coming of spring.

Clubs and organizations are formed to meet the current interests and needs of students. Current organizations include the Student Programming Board, the Student Advisory Board, Theta Alpha Phi Theatre Honorary, Kappa Delta Pi Education Honorary, Psychology Club, Anthropology Club, Art Club and Geography Club.

During the 1990's, The Office of Student Activities developed the R.E.A.C.H. (Resources Encouraging Awareness Concerning Health & Wellness) program. Its goal is to provide information on various health-related topics. A number of presentations have been given annually including AIDS Education, Stress Management, Alcohol Awareness Week, Depression, Great American Smokeout, Relationships and Overcoming Test Anxiety.

The OSU Mansfield campus has maintained a link with traditional activities at the OSU Columbus campus. Students have joined in homecoming activities by sponsoring the first regional campus float for the annual parade and were the winners of the regional campus lobby-decorating contest.

A variety of physical fitness activities are available in the Physical Activity Center. Programs include intramural sports, weight training, open recreation, volleyball, Jazzercize, martial arts, and ski lessons.

Students using the online catalog circulation system in the campus library

PEARL CONARD ART GALLERY

The Pearl Conard Art Gallery endeavors to bring the works of national and international artists to the campus. It is the objective of the gallery to provide quality exhibitions that provoke discussion and challenge the thought process. The gallery, which opened in 1989, also features exhibitions by students and community artists. The facility, with its unique contemporary design, is adjacent to the east side of Ovalwood Hall. A breathtaking forest view is in evidence through the gallery's large windows. The building's design, featuring extended wings, glass and brick exterior and "lantern" roof, is a striking addition the campus landscape.

CHILD DEVELOPMENT CENTER

The Child Development Center serves a dual purpose. In addition to providing an exceptional educational program for children, the Center serves as a teaching laboratory for college students preparing for careers working with preschool children and their families. Students observe and work directly with the children under the supervision of the Child Development Center's staff.

Teachers have been specifically trained in early childhood education and have been selected for their ability to nurture young children. Staff are assisted by college students who are completing requirements for courses in early childhood education.

Daily activities are varied and concerned with the whole child—that is their mental, emotional, social, and physical growth. There is a balance of active and quiet play with both indoor and outdoor activities. Each child is given opportunities to participate in creative art, block building, science, music, storytime, language, and motor skill development activities. The toddler and infant programs include specially planned, age-appropriate activities.

A new outdoor pavilion for use by campus and community

90

CONCLUSION

In building the future, the single most important element will be educated people—people who have the tools to meet the challenges of the 21st century.

The Ohio State University at Mansfield has a distinguished history of service to north central Ohio. The institution has accomplished a great deal in a short time, becoming an indispensable part of the life of the community. Community leaders speak with pride about the presence of a regional campus of one of the nation's preeminent public universities.

It is clear that Ohio State Mansfield has become a solid institution of higher learning, providing opportunities for excellence.

Rodger Smith
Beth Enders
Public Relations
Ohio State University
Mansfield Campus
Mansfield, OH 44906

Publicity
OADE Conference

Developmental Education: *Making a Real Difference*

The Ohio Association of Developmental Education will hold its thirteenth annual conference at the Westin Hotel, (*formally The Great Southern Hotel*) in Columbus on November 6-8, 1996. Highlights include a keynote address by Eleanor Johnston entitled, *"Using our Three Brains to both Teach and Learn"*. Jane Jarrow of AHEAD will do a pre-conference workshop presenting updated ADA information and ways to work with students with disabilities. A panel of college presidents from two-year and four-year institutions will speak to current issues and concerns in Developmental Education. Join us! For registration contact **Besty O'Conner at Columbus State Community College, 550 East Spring Street, Columbus, Ohio 43215, (614) 227-2474.**

Teaching and the Electric Current

Kent L. Zimmerman

"The world seldom notices who teachers are,
but civilization depends on what they do."
—Lindsay Stiles

It was a humbling honor to be nominated and then named the OATYC "Teacher of the Year" at the annual luncheon meeting, held in Springfield in 1995. At the ceremony, as the 13 nominees stood in front of the assembled crowd at the luncheon, and their short biographies were read, I was very impressed with the achievements and accolades of the other teachers. These teachers were being honored for their excellence in the classroom.

I was left wondering, what are some common characteristics of a "good teacher?" What techniques are utilized to accomplish the goal of "good teaching?" How does significant learning occur in the classroom?

Drawing on 17 years of college classroom experience, I would like to consider three characteristics of a "good teacher":

a) knowledge of the subject;
b) enthusiasm; and
c) a sense of humor.

In order to excite the learner, there is simply no substitute for knowing the course material, and communicating the information concisely. We must assume that two-year college instructors have a solid command of the appropriate theories. For some, the downfall most often occurs in the attempt to communicate that knowledge.

Dale Leathers, in his book *Successful Nonverbal Communication*, identifies one nonverbal behavior that significantly damages the instructor's credibility: an abundance of nonfluencies. The excessive use of "and uh," "you know," "OK," "um," and others may suggest to the student that the presenter may be unfamiliar with the material, unprepared to present the material, or uncomfortable in the classroom setting. If you are not sure if you have an irritating nonfluency, then videotape or audiotape two of your presentations. Listen to the tapes in the privacy of your office. You can be assured that if you just noticed an irritating habit, many of your students have been aware of that bothersome habit for some time.

The teacher's "knowledge of the subject" is frequently shown in how the information is explained. Two very popular methods to consider are the use of examples and story-telling. Examples should enhance the theory by showing its application or implication in possible scenarios. Students are a valuable resource in this approach, especially community college students. They have a fascinating pool of experiences from which to draw. With the proper coaching from the instructor, students can learn significantly from each other's examples.

The purpose of using stories is to elaborate upon the primary theme for the learner. If you have story-telling skills, try them. Most students respond very well to this approach.

The selected stories should be specific, focused, and brief. For example, when my class is studying the *Sapir- Whorf Hypothesis*, we discuss how one's perception of reality is determined by the language system that controls one's thought system. Put simply, the words used by "Person A" may have different meanings for "Person B."

My initials are "KZ." When I first attended college, I used my initials regularly to introduce myself. When I enrolled in a German university, Phillips Universitaet in Marburg, during my Junior year, I still wanted to use those initials as my moniker. I introduced myself like this: "Guten Tag! Ich heisse KZ." (Good day! My name is KZ.) The initial reception received from the German student counterparts in my dormitory was extremely cold and unfriendly. Repeatedly, I tried to strike up a conversation with them. Alone in my dorm room, I pondered my plight. By chance, I happened upon the "Abbreviations" section in my German dictionary. I found my "KZ" initials! Then I read what my initials represented: they were short for "Concentration Camp." These words shaped the German students' thought system, which affected their perception of reality. Can you imagine an American walking up to a German saying, "Good day. My name is Concentration Camp?" That story clarified the *Sapir-Whorf Hypothesis* for the students more clearly than most text references.

The second characteristic of a good teacher is enthusiasm. Publisher Bertie Forbes once said that enthusiasm was the "electric current" that kept the engine of life going at top speed. If we are not excited about our discipline, how can we expect our students to become excited? Focusing on what the course material can do for the students is one way for the instructor to demonstrate enthusiasm in the classroom. The instructor's vocal cues, facial expressions, and gestures can confirm that the instructor cares about the subject and the audience.

According to Paul Rankin, listening is the most frequently used communicative skill by adults, but the least practiced. To show the importance of listening, I offer interested students in my "Effective Listening" class the opportunity to use their learned listening skills outside the classroom. Theory meets reality. How? The students agree to spend 20 volunteer hours at local, nonprofit agencies, and practice their listening skills with the clientele in a hospital, nursing home, or day-care center. These students arrange their work schedules with, and receive their assignments from the agency volunteer coordinators. The students receive class credit for their completed volunteer efforts. The goal of this volunteer opportunity is to teach the students that it is not enough to know about a skill; they must develop the discernment on when, where, and how to use the skill.

Energy levels are contagious. If I display my enthusiasm for the course material and this volunteer opportunity vocally, facially, and kinetically, the students will more seriously consider the offer. Although I have previously led this discussion a dozen times, this is likely the first time this group of students has heard this presentation or contemplated this assignment. As the instructor of the class and spokesperson for the involved agencies, both the students and potential clients deserve an enthusiastic and dynamic presentation.

The third characteristic of a good teacher is a "sense of humor." Humor can be used to lessen the tension in the room, or to illustrate a point more vividly. The humor should be in good taste and consistent with the theme of the moment.

As an example, in class, we were discussing the cultural differences in the use of formal and informal time. I recalled a time when I studied at Phillips Universitaet in Marburg. The German course catalog gave the starting and ending times for each course, just like our American universities' course catalogs do.

I enrolled in a German Literature course, held on Monday-Wednesday-Friday from 11:00 a.m. to 12 noon. On the first day, I arrived at the classroom by 10:50 a.m.. No one was there.

Eleven o'clock - no one. 11:05 - no one. About ten after, a few German students started arriving. Precisely at 11: 15, the German professor entered the room, placed

his books on the lectern, and started class. With the striking of noon, he closed his notebook, and departed.

On Wednesday, I arrived at 10:55. No one was there. The German students arrived about ten minutes after the hour. The professor arrived at 11: 15, and promptly began his lecture. He ended his speech at noon sharp.

As I was exiting the classroom, I stopped a German student. "Why do we begin our class 15 minutes after the announced starting time?" The German student replied, "To show respect for the many years of education, we give the professor an extra fifteen minutes to arrive punctually." I then asked him, "Why don't we meet an extra 15 minutes to make up the lost time?" The student retorted, "When the course catalog states the class ends at noon, we dismiss class at noon!"

Eleanor Roosevelt commented, "If teachers can accumulate degrees and write books, well and good, but the first requisite should be to inspire youth." How do we inspire today's student? Start by example. Demonstrate your command of the course material, your love for the teaching profession, and your ability to laugh at your mistakes. Students will see us as mentors, as role models, and as real people. Somewhere, a teacher inspired you, and you decided then that you wanted to teach. You were zapped by the "electric current" of enthusiasm. There might be a future teacher in your classroom this term.

Zap them with that "electric current" today! Our civilization depends upon it.

Kent L. Zimmerman, Professor
Sinclair Community College
Dayton, OH 45402

Tech Prep—One Year Later

Darius Rastomji and Valerie Frear

Introduction

In Spring 1995, we discussed Tech Prep as an educational option for success (*OATYC Journal*, Vol. XIX, No.2). Questions as to Why Tech Prep, critical components of a Tech Prep Program, the advantages of Tech Prep, the Ohio Tech Prep Consortia, and the Akron Area Tech Prep Consortium were presented. A year later, we want to inform our readers on the status of Tech Prep and the progress that is being made at the federal, state, college, and high school levels, including interviews with Tech Prep students currently enrolled at the high school level.

Federal and State Legislation

Tech Prep is a nationwide initiative with programs in all fifty states. Tech Prep is one of the many programs under the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. Later, in the spirit of budget cutting, Tech Prep was attacked by the U. S. Congress. Under the initial rescissions bill, the Perkins programs such as community-based organizations, consumer and homemaking education, Tech Prep, and other programs for vocational education were to be eliminated. However, the funding for Tech Prep has been restored in both the

House and Senate. For the fiscal year 1994, the funding level was $104 million. With all the proposals for cutbacks and/or consolidations in education and training programs, the House Appropriations Committee restored all $108 million for Tech Prep for 1995 as a result of the many faxes and letters sent by various Tech Prep communities (National Tech Prep Network, August 1995.) Funding for Tech Prep in 1996 looks secure ($100 million). It is crucial that the voice of the community be heard by the Congress for the continuation of Tech Prep as a viable option for educating high school students. For Tech Prep to remain healthy, adequate funding must be made available for the year 1997 and thereafter. If there are doubts among lawmakers, educators and the business community as to the potential value of a tech prep program, Andrea B. MacQueen (*Tech Directions*, February 1996) justly indicates *"We must allow sufficient time for each stage of a program 's development-from conception to implementation to administration—before determining its significance."* Only time and careful evaluation will determine the true effectiveness of the Tech Prep program.

Jack Lenz, Supervisor, Tech Prep at the Ohio Department of Education, indicated that legislation continues to affect positively Tech Prep at the federal and state level. Federal legislation includes the continuation of the Tech Prep Education Act as part of the Vocational and Applied Technology Act of 1990. Ohio State Legislation includes state funding for Tech Prep for the first time. The Ohio Biennium budget for the fiscal year 1996 is $1.5 million with $2.0 million for the fiscal year 1997, a hopeful climate for Tech Prep's continued success in Ohio. Edgar and Parnell (*Community College Journal*, Feb/Mar 1996) indicated that energetic state-level leadership is fundamental in the development of sustainable Tech Prep programs. The Ohio Board of Regents and the Ohio Department of Education have collaborated in developing a solid foundation for Tech Prep as a means of educating students in technical careers in the future. Community and technical colleges involved with Tech Prep are committed to developing a competency-based curriculum based on advanced skills to meet the challenges of the twenty-first century. Tech Prep is viewed by Ohio as one of the ways to make changes in schools, colleges, and the workforce.

The Akron Area Tech Prep Consortium

The Akron Area Tech Prep Consortium is one of Ohio's twenty-four consortia. The Community and Technical College of the University of Akron, Wayne College, and six vocational education planning districts within Summit, Medina, Portage and Wayne counties are included within this consortium. The projected date for students entering the Community College at the University of Akron is Fall 1996. Janice Eley, Coordinator of Tech Prep, for the Akron Area Tech Prep Consortium, indicated that there were approximately eighty-six students currently enrolled at the high school level in a Tech Prep track within the Akron Consortium. Exactly how many students plan to attend The University of Akron's Tech Prep program at the Community and Technical College is unknown at this time. To date there are three tracks at the high school level—Health, Business, and Engineering Technologies. High schools are working with colleges on how best to deliver these competencies without duplication of course material and by sharing state-of-the-art software and equipment. Eley indicated that nearly $1 million has been awarded to the Akron Consortium to plan, develop and implement Tech Prep programs in the fields of engineering, business, and health. Eley further indicated that the application fees for students entering the Tech Prep program would be waived if eligible

students are directly admitted to the University of Akron's Tech Prep program during their senior year at high school, a further incentive for eligible students to plan ahead and become more focused and goal oriented in the senior year.

Tech Prep Tours at The University of Akron's Community & Technical College

The Community & Technical College, in an effort to acquaint high school students with Tech Prep at the college level and ease some of their concerns, was host to students from the Medina County Career Center and from Wadsworth High School during this past year. Students upon arrival were given a welcome by the host college, after which there were mini-sessions by faculty in the areas of Computer Programming, Accounting, and Office Administration. Students toured the college facilities and visited various computer labs. Information on the different options of Tech Prep were also made available, and student concerns were addressed by the host college at both formal and informal gatherings. Admission and enrollment policies at the college were the final topics on the agenda, with hopes that the students would leave feeling more at ease about what they might expect once they leave high school. The Community College Tech Prep program staff hopes this kind of visiting can be an ongoing process. They see it as a means of fostering good relations between the College and high schools and their potential Tech Prep students.

Visitation with Tech Prep Students at the MCCC (Medina County Career Center)
Teacher viewpoints

Valerie Frear visited and talked to teachers and students at the Medina Tech Prep Center. Donna Cardone, instructor of Tech Prep at the Medina County Career Center, indicated that the Center motivates students to do their best. She said that students realize the importance of a good education and are further motivated by taking higher level skill courses within the Tech Prep curriculum. There are currently twelve seniors and seventeen juniors attending Tech Prep programs at the MCCC. The Tech Prep classes are strictly for Tech Prep students at the MCCC. The classes are modeled as a business environment (as far as possible) to give the students a sense of responsibility and self-assurance so that they are better prepared for the transition from school to work. All students must clock in and out. Students are required to dress professionally one day a week as if they were going to an actual office to work. Students in the first class last year at the MCCC developed their own slogan and logo for the Business Management Technology area. Students also developed a folder design to promote the Business Management Technology Prep Program. Students participated in and edited a local school newspaper spending long hours determining the contents they deemed relevant to their newspaper. Cardone is very proud of the fact that the students attending this program have had near-perfect attendance. Usually half a day is spent in the lab and the other half in the classroom. The MCCC received a start-up grant for $20,000 for Tech Prep, allowing for the purchase of some up-to-date computers. Students are also required to complete six weeks of field experience. This requirement involves the spending of one half-day each week for six weeks the student's company of choice. Some of these field experiences have led to employment opportunities. Cardone believes Tech Prep is a marriage between business, college and vocational education.

Student viewpoints

Rachel Gordon, a student at MCCC took honors classes in high school, but found that these classes were not as challenging as the classes in a Tech Prep

program. Taking honors classes, she indicated, just involved more work. She found that students in the Tech Prep classes received greater individualized attention, had more flexibility to choose their area of study, and found the applied classes more interesting even if it meant long hours of work.

Rachel Burke has won an area competition sponsored by the Business Professionals of America and is going to present her Marketing-Advertising speech in Columbus, competing with other area winners at the state level. She indicated that her grades had improved since taking Tech Prep courses, which she also found to be interesting.

Adam Cornett wants to own his own business and says he will probably go to The University of Akron's Tech Prep program. He enjoys the Tech Prep program.

Conclusion

The cooperative efforts of federal and state governments, high schools, colleges, and business professionals, together with a meaningful high school and college curriculum, will determine the future success of Tech Prep. Tech Prep is a gradually evolving educational process. If carefully nurtured and monitored, it has the potential of becoming a successful educational option for the twenty-first century.

Darius Rastomji
Associate Professor
Computer Programming Technology
University of Akron Community
and Technical College
Akron, OH 44325

Valerie Frear
Part-time Instructor
Computer Programming Technology
University of Akron Community
and Technical College
Akron, OH 44325

The Clermont County Distance Learning Network

Patricia E. Friel

In a recent issue of the *Phi Delta Kappan*, Mehlinger (1996) characterizes Information Age technology as an "irresistible force" facing schools (p. 402). He further predicts that "schools should expect more *integration, interaction,* and *intelligence* from future technology" (p. 405). Distance learning's two-way, full-motion, interactive television has gained educational attention in the State of Ohio as a technology capable of integrating audio, visual, and databased technologies, fostering interaction over long distances, and promising greater capacities over time. The Ohio Department of Education is not resisting distance learning's capabilities. In fact, they are seeking to involve various clusters of schools across the State in distance learning programs. Eventually, they plan to link these school clusters together into a state-wide fiber optics system referred to as BEAM (Business, Education and Medical System).

Clermont County, located in southeastern Ohio, was the first area county chosen to use a fiber optics program. First, the rural nature of Clermont County means wide distances between schools. In addition, many school systems are economically disadvantaged by a low property tax base. Thus, the opportunities

afforded schools and districts to pool resources, increase course offerings, and employ unique teachers' skills made them beneficial recipients for this program.

The impetus for Ohio's first county-wide fiber optics program was inspired by the Clermont County Technology Task Force. Although the mission of the Task Force includes a broad range of issues related to the development of technology, this is perhaps its most significant undertaking to date. As a collectivity, it was instrumental in fostering partnerships among the Clermont County Board of Education, Clermont County school officials, and Cincinnati Bell Telephone. In June of 1993, representatives from each faction signed a contract finalizing plans to provide county students with long-distance learning opportunities.

These partnerships were fueled initially by an offer from Cincinnati Bell to invest $1.4 million to install all fiber optic wiring and to provide free operating expenses for the first 18 months. In addition, the Ohio Department of Education opened the door to start-up funds through Ohio's Technology Equity Commission. Further funds were contributed by local school districts, the University of Cincinnati Clermont College, the Greater Cincinnati Foundation, and numerous local businesses.

This county-wide fiber optic system, referred to as the Clermont County Distance Learning Network (CCDLN), links 10 high schools, two joint vocational schools, and U.C. Clermont College, a community college branch of the University of Cincinnati. Even though Cincinnati Bell provided the backbone of the network, each school was required to create a classroom with the equipment necessary to access the fiber optic cables. This required $30,000 per site for three cameras, three monitors, seven microphones, a video cassette recorder/player, a 6-channel audio amplifier, two speakers, a teacher station, a control panel, a computer, a facsimile machine, and a Xerox machine.

Finally, by January of 1994, each site was ready to link up to other sites. Thus, program offerings commenced. U.C. Clermont College's role is highlighted below to illustrate how a community college can interface with area schools to provide long-distance learning opportunities. Specifically, the distance learning options offered by the College are discussed, along with three instructors' assessments of the pros and cons of using such a system and some future implications concerning this technology.

Distance Learning Options

According to Glenda Neff, Coordinator for the CCDLN at U.C. Clermont College, five basic types of courses or programs have been offered through the College since January of 1994. First, credit classes have been offered for both Clermont students and area high school students eligible for Postsecondary Enrollment Options (PSEO). PSEO is the state initiative which allows high school juniors and seniors with a 3.0 GPA or better to take certain college courses in addition to or instead of high school classes. Eligible high school students may elect to receive either college credit only (Option A) or a combination of high school and college credits (Option B). This provides them the chance to complete the first two years of a baccalaureate program or a two-year technical program and to graduate simultaneously with a high school diploma and an associates degree.

To accommodate area high school students, the CCDLN has offered introductory courses, primarily in psychology and sociology, after high school hours or in the evenings. College students remain on site at U.C. Clermont College, the originating site, while high school students remain in their schools to receive the College's transmission.

Whereas area high schools agreed to cap enrollments at 30 students, U.C. Clermont College lowered the cap to 25. The goal is to keep learners at a minimum to permit maximum interaction. Each site easily accommodates approximately fifteen students. In addition, Clermont formed a policy to originate from the site with the most students. To date, Clermont's facility has had the most enrollment.

Several concerns have surfaced with regard to this option. For one, only one class has been offered during regular high school hours due to the incompatibility of high school bells with college periods. Indeed, even daily schedules among high schools often vary. Thus, for an hour and a half college class, a bell may ring at one site, and three high school students leave. Then another bell may ring at another site, and five more students leave, perhaps 30 minutes before class ends.

Moreover, although high school students only need 7 1/2 credit hours of college credit to count towards a year's worth of study on the Carnegie system, they end up taking 9 college credit hours annually for most courses (3 credit hours per quarter for a years sequence). Even though more time is devoted to a course, the dual credit students receive remains an advantage overall.

Further, although U.C. Clermont College is reimbursed at the state level through monies allocated to local districts for students who opt for PSEO's Option B, the sliding scale system used to cover PSEO students' college fees usually equals approximately half of the College's actual tuition. Plus the College provides textbooks, considered college property, to Option B students. This means course work is offered to PSEO students at a reduced rate. Only Option A students pay full tuition, textbook, and registration costs.

Still, PSEO provides colleges with a pool of students they otherwise would not serve. The CCDLN also reduces travel time for high school students and, potentially, for college instructors attempting to fulfill the PSEO mission. And high schools enjoy expanded course offerings.

The second type of course offered on the CCDLN consists of adult evening classes. These are regular college classes targeted to full-time and part-time college students and offered once per week for 2 1/2 hours. Microeconomics and macroeconomics have been offered using this format. Additionally, a graduate course in educational technology is planned for local teachers this year. Essentially, such classes serve the same purpose as off-campus classes—to bring the college classroom closer to students. During an initial planning meeting and orientation, the instructor and students determine CCDLN locations with close proximity to students' homes and/or work locations. Various sites are pinpointed and contacted for availability before the next class session. Students are then telephoned during the week in between sessions to confirm site locations. This orientation also includes student training in how to operate CCDLN equipment at off-campus sites.

Clermont College has experienced some difficulties with the adult evening class format. For example, some high schools are unaccessible at night, alien a lack of staff to supervise students. Also, with growing offerings among schools, there is an increasing risk of finding facilities unavailable due to other courses or programs on the schedule. This also has a greater chance of occurring, given the kind of last minute requests made by adult evening classes. Further, signage and contingency plans become important, given students are on their own to locate distance learning facilities in sometimes unfamiliar buildings and to operate equipment with perhaps no backup staff on site.

Another type of offering through the CCDLN consists of noncredit classes and programs, open to high school students, college students, and the community at large. ACT preparation classes have been offered for high school students as well as a series of college seminars tailored to high school seniors. As examples of business

links, Clermont College and the Clermont County Chamber of Commerce have sponsored an educational forum, and Cincinnati Bell and the Chamber Economic Development Committee have sponsored a seminar on the information super highway. Furthermore, educational administrative meetings, political debates, and courses for CEU credits have been televised.

Ms. Neff indicated that a sign language class was offered through another option referred to as a consortium class. This option represents a means to provide training in areas suggested by a cross-section of students, but for which both the curriculum and a teacher are unavailable at any site. In these cases, the County Board of Education acts as the fiscal agent to locate and hire a teacher, avoiding extensive curricular and personnel procedures. The County Board then bills schools who may decide to charge students a nominal fee.

One special daytime course was offered at Clermont College last Spring as well. This is a new requirement for Records and Information Management and Computer and Information Systems majors. The course, entitled "Telecommunications," was a first time collaborative effort between U.C. Clermont College and Cincinnati Bell. Eighty percent of the sessions were conducted by Cincinnati Bell employees from their headquarters in downtown Cincinnati and transmitted live to students at U.C. Clermont College. Bell presenters covered topics such as the history of telecommunications, telephony, telecom networks, telephone systems, voice, data, and video integration, and new directions in telecommunications. They also provided both an on-site and an online tour of their facilities. The remaining twenty percent of the sessions were covered by Clermont faculty and staff, including sessions on the internet and on other computer topics. The teacher of record assumed the role of a facilitator, coordinating class sessions, student assignments, and the construction and grading of exams. She, however, never delivered instruction.

Participant feedback concerning all types of options has been positive overall. Students like the convenience of the CCDLN, the course enrichment, the variety of audio-visual capabilities, resource sharing between institutions, and a chance to learn about and to use technology. Their suggestions have included obtaining advanced organizers and outlines of instructors' lessons so they can listen more and take notes less, improving the sometimes cumbersome process of mailing materials back and forth, and easing the process of getting the instructors' attention by time.

The Pros and Cons of Distance Learning Instruction

Distance learning instructors at U.C. Clermont College who began last year with the upstart of the system received hands-on training in equipment and facility use only. This training continues to be provided by Ms. Neff, U.C. Clermont College's CCDLN Coordinator. Instructional guidance using interactive television was provided via a CCDLN guide book (1993), including techniques for delivering effective personalized instruction, techniques for classroom management, and techniques for effective use of technology in teaching.

At the start of the Autumn term this year, new instructors received training from a consultant, Dr. Robert E. Robison. Dr. Robison is Supervisor of Foreign Languages and ESL with Columbus Public Schools. His training program (1995) served to provide hands-on experience with the interactive distance education classroom by discussing, observing, and critiquing effective strategies for interactive television and by developing a mini-lesson to be taught over the system. The training covered delivering effective presentations, humanizing instruction

through heightened interaction, creating effective print materials, visuals, and demonstrations, dressing for television, teaching to different learning styles, and incorporating interactive learning activities designed for receiver sites.

Based on interviews with three instructors at U.C. Clermont College about their experiences teaching for the CCDLN, I compiled the following lists of pros and cons concerning distance learning instruction. One instructor has dealt exclusively with college and PSEO students; one has taught a regular adult evening class; and one facilitated the "Telecommunications" class.

The pros of teaching for interactive television, as experienced by these three instructors, are summarized below:

- Instructors can do nearly anything in the distance learning classroom that they can do in a regular classroom.
- Distance learning promotes quality teaching because instructors must organize each class session thoroughly in advance, coordinate their presentations effectively in the classroom, and provide clear directions and transitions.
- The interactive nature of distance learning promotes small class sizes and hands-on activities.
- Distance learning classes provide the same course content and grading formats as regular classes.
- Information can be disseminated faster with the technology available in the distance learning classroom, and all information is disseminated in real time through the fiber optic system.
- Distance learning promotes cooperation between students and teachers through the mutual use of equipment and the need to respect students at other sites.
- Instructors are forced to prepare effective print material, visual aids, and demonstrations for television viewing.
- Because instructors cannot read nonverbal behaviors at distant sites as clearly, distance learning promotes more active listening to ascertain students' meanings.
- Instructors can be creative and enjoy directing and producing their own classes with the diversity of technology available.
- Students find that distance learning opens up a lot more curricular choices, and is convenient, economical, enriching, and interesting.

On the other hand, the various disadvantages of distance learning, as expressed by these three instructors, are summarized below:

- Distance learning may be a problematic form of delivery for young, immature students and students needing developmental assistance.
- Instructors as well as students are unable to see the entire fields of interaction simultaneously.
- Instructors and students at distant sites are unable to communicate through the sense of touch, and subtle nonverbal behaviors are imperceptible.
- Microphones, particularly wireless microphones for instructors, can produce distracting feedback.
- Equipment can malfunction, so instructors must be prepared to troubleshoot and to enact alternate plans of action.
- In-class pencil and paper testing can be problematic if there are no supervisors available at the receiving sites, thus take-home tests, out-of-class assignments, and oral work are emphasized.
- Distance learning provides less room for spontaneity in the classroom, given it requires a high degree of staging.

Future Implications for Distance Learning

The CCDLN is new, and, as such, is striving to expand and develop its programming and to iron out the kinks in its current operations. Specifically, since U.C. Clermont College is one of only two satellite locations in the county, they would like to hook up satellite capabilities to the fiber optic system in order to provide teleconferences and PBS programming more economically. In addition, they would like to expand partnerships with local businesses, such as the partnership for the telecommunications course, in order to utilize the expertise of local personnel to deliver technical classes. Moreover, the main campus of the University of Cincinnati is developing distance learning capabilities. Thus, U.C. Clermont College hopes to link up with them to expand college course and program options for Clermont students. Naturally, the aim of the College is to expand PSEO, adult evening, non-credit, and consortium courses as well.

As courses and programming grow, scheduling among sites will also become doubly important. This scheduling will involve urging all 10 high schools and perhaps both vocational schools to develop common calendars and daily bells. It also will require continued, close coordination among CCDLN coordinators in terms of site negotiations and scheduling.

Another consideration involves the assessment of distance learning activities. New forms of instructor and course or program evaluation need to be developed to accommodate the differences in distance learning classrooms. Assessments of the short-term and long-term learning outcomes from distance learning instruction need to be considered and created as well.

Finally, as pointed out in *Microcomputers and Education: Eighty-fifth Yearbook of the National Society for the Study of Education*, Taylor and Johnsen (1986), along with the Carnegie Commission on Education, urge educators to emphasize "technology literacy" to provide the opportunity for students to make responsible choices about the uses of technology. They state:

> A minimum requirement for such choice making is the requisite education and willingness to discover and critique the range of possible decisions that could be made concerning the implementation of any technological phenomenon. Critique in this sense is the capacity for building a continuum of information reflecting the full spectrum of responses from which we are able to articulate tradeoffs. (p. 226)

This translates best into the development of a technology literacy course which illuminates the potential drawbacks of technology as well as the benefits. This article, at the least, is a step toward understanding the actual impact of distance learning systems for future analyses.

Patricia E. Friel
Assistant Professor of Communications
University of Cincinnati Clermont College
Batavia, OH 45103

PLUS ONE

Grammar Making a Comeback

Bill McCleary

Grammar has continued to plague English teachers as to what it is and what it is not, how and how much of it to teach. Writing across the curriculum has made all teachers aware of the need to come to common grips with "grammar" and its role in teaching language to students. Bill McCleary discusses proposals for simpler and more accurate grammars that show promise for improved teaching of correctness and style (with permission, Composition Chronicle, *Vol. 8, No. 6, Oct. 1995).*

It's b-a-a-a-c-k. (Sorry, but I couldn't resist.) Yes, after about two decades of virtual banishment from the higher reaches of English teaching theory (though not, of course, from most English classes), grammar has returned as a subject of serious discussion. For instance, Four Cs went from just one panel that mentioned grammar in its title in 1994 to no fewer than four this past March. The former Association of Teachers of English Grammar went from not even being able to get its resolutions voted on at NCTE to being accepted as an Assembly of NCTE. And we even have a trickle of books being published about grammar (rather than linguistics) for English teachers, including a couple from the unlikely sources of NCTE and Boynton/Cook-Heinemann.

Though the mainstream of NCTE seems to continue ignoring grammar (a quick search of the program for the upcoming NCTE convention revealed only one concurrent session [out of 360] with grammar in its title), the grammar pendulum elsewhere, like one for phonics and other language structures, seems to have reached its full upswing on the anti-structure side and begun its return. We can only hope that we have stretched this metaphor too far, and the downswing will result not in a return to rote learning of yesterday, but to a saner, more useful vision of structure and its use in English classes, particularly in composition. The potential for real change is there for grammar (as well as for other structures like phonemics, morphemics, and genres).

One sign of real change could be seen in this past summer's meeting of the newly renamed Assembly on the Teaching of English Grammar. The presentations were uniformly professional. Gone were yesteryear's jeremiads against the supposed deterioration of the English language, along with the cutesy ways to teach nouns and verbs to the little moppets. In their place were serious analyses of the problems of teaching usage and proposals for a more useful version of English grammar, proposals that were referred to as part of a search for a Pedagogical grammar" by several participants.

Why grammar has returned

What is going on? Partially, it's just a a new assertiveness by a group of people who never lost interest in grammar as part of the English curriculum. The love of grammar has always been there, bubbling below the surface, kept alive in college English departments by the need to teach grammar courses for prospective secondary English teachers. (Much to his surprise, your esteemed editor finds himself teaching two such courses these days.) A second influence

may be the dismal Results of various assessment efforts, which bring to notice once again the nagging problem of what to do about "error" in student writing. We face a lot of pressure to "do something" about it, and teaching grammar has always seemed like the logical thing to do, despite the abundant evidence that it doesn't work.

A third influence may be a growing interest in several aspects of composition that seem to require students to have at least a modicum of knowledge about grammar. One is the "stylistic grammars" that promise users a clearer, more graceful style and elimination of bureaucratese, sociologese, and other ridiculed styles Perhaps the most popular book espousing this approach is Joseph Williams' *Style: Ten Lessons in Clarity and Grace* (HarperCollins). (This is a book that I have found quite helpful but that my students have not loved. Perhaps books like this are more appropriate for experienced writers than for college students.) A book with a slimier approach but different emphasis is Martha Kolln's *Rhetorical Grammar: Grammatical Choices, Rhetorical Effects* (Macmillan). Many of the principles covered in Kolln's book are presented in this month's professional article. As you'll see when you read her article, she not only has some ideas for a better style, but also demonstrates that much of the conventional wisdom about effective style is far from accurate. Just as Williams demonstrated that the passive voice is not only quite useful in certain cases but also absolutely required in some situations, Kolln shows that the traditional advice always to avoid beginning a sentence with an expletive (e.g., "there" and "it") is also oversimplified.

The current approach to error

True, error has not been entirely ignored by the field of composition. However, most composition specialists have reduced its place in the writing curriculum. Current practice is to attack error only during the final editing stage of writing, to individualize the instruction as much as possible, and to limit each lesson to just one or two errors. However, this method does not seem to have caught on, perhaps because too many teachers lack sufficient knowledge of the technicalities of grammar and usage to conduct successful lessons and because individualizing instruction takes an enormous amount of time and organization. Also, if my observations are correct, many teachers still do not use the process approach to writing presumed by the admonition to teach correctness during the editing stage. Finally, I haven't seen any proof that teaching correctness during the editing stage actually works. I would acknowledge that it probably works if the teacher does it conscientiously and well, but I haven't seen the proof. It's hard to change things in English teaching even if you have the evidence; without evidence, change is highly unlikely.

So is there a potential for a new, successful way to deal with correctness and style instead of a return to the old, ineffective grammar-based instruction? Having been around the block a few times, I am not optimistic, but I can see at least three trends that could lead to a new approach if only the profession will pay attention. These address what I see as our three main needs if we are ever to successfully deal with the problem of error more accurate statements of the rules of correctness, a more teachable grammar that kids can learn well enough to apply, and a better pedagogy than the ubiquitous workbook.

The potential for more accurate rules can be seen in advice given by stylists like Williams and Kolln. They show that English teachers have often been basing their advice on inaccurate views of how the English language actually works. Advice to avoid the passive and the expletive may apply in many situations but

not all. Sometimes expletives and passives are the best constructions to use. Indeed, it may not be overstating matters to say that most of the so-called rules of correct English are oversimplified or downright wrong. It is not true, for instance, that fragments and comma splices are always wrong. And every college writing teacher can attest that the only "rule" that every freshman can cite is the completely false one about never beginning a sentence with a coordinating conjunction.

Fending the truth about the rules

We are getting more accurate versions of the old rules not only in the stylistic grammars, but also in a smattering of articles on usage that have appeared in various journals. But perhaps the most comprehensive treatment can be found in a new book by Brock Haussamen aptly called *Revising the Rules: Traditional Grammar and Modern Linguistics*. Haussamen takes on a wide variety of rules and shows that in nearly all cases the traditional versions of the rules do not reflect how English actually works. (See p. 3 for a description of Haussamen's book). It is not too farfetched to believe that one of the main reasons that students cannot learn to follow the rules is that the rules are not accurate. A rule that cannot be followed consistently isn't worth much. For instance, if it's not true that a subject must always agree in number with its predicate, then how is the poor student to know when to follow the rule and when not to. We know, because we have learned the truth implicitly through thousands of hours of reading, but many students have not had the same opportunity.

A second promising change is a search for a grammar that works better for students than the other grammars currently available. Traditional grammar—the grammar taught in English textbooks—is inaccurate both in its description of real grammar and in the explanations given to students. This makes it difficult to learn for anyone who does not grasp it through intuition rather than through explicit learning. And the other grammars, scientific ones like descriptive, structural, generative, and the like, are too technical for use in teaching. What we may need, in other words, is a "pedagogical grammar that is both accurate and simple. One that has already been published is Rei Noguchi's "writer's grammar" as described in his book *Grammar and the Teaching of Writing: Limits and Possibilities* (NCTE, 1991). And at the ATEG conference this it's too early to tell whether these pedagogical grammars will help, but at least someone is trying.

Finally, the third trend that may help in the attack on error is better teaching methods, something to replace the standard approach that we have come to call "drill and kill." An example is the model based on cognitive psychology and explained in an article that appeared in the Fall 1989 issue of the *Journal of Basic Writing* (Muriel Harris and Katherine E. Rowan, "Explaining Grammatical Concepts). In this model the teacher must construct fairly elaborate lessons that begin with a more accurate view of the concept to be taught than is provided by traditional explanations. The lessons then incorporate a number of techniques that have been proved successful by cognitive scientists. These include restatements of the grammatical concepts underlying the one to be taught, copious use of both correct and incorrect examples (despite the suspicion of incorrect examples prevalent among writing teachers) along with explanations of the difference, and practice with feedback. None of these techniques are new; what's new about the Harris and Rowan model is that each lesson incorporates many techniques, in contrast to our usual lesson of a handful of overly simplfied sentences with fill-in-the-blanks exercises.

My students and I have done much experimenting with this model and have found it far from fool-proof. Indeed, since we work with real sentences and not made-up ones as much as possible, we often get the wrong answers to our own test questions. But I take this as a promising sign that we're working with real problems rather than the usual oversimplified textbook problems. If we ever figure out how to devise lessons or materials that solve these problems, we will be onto something.

Furthermore, the efforts to use this model can only be helped by the other trends identified above. Since the Harris and Rowan model requires at least a modicum of grammatical explanation, a better grammar should improve the success of the lessons. And since it also requires precise descriptions of the rules to be taught, we will be helped by the efforts to describe English usage more accurately. At some point, perhaps, all this will come together to help us deal with our most infamous yet ubiquitous responsibility—to improve the correctness of the usage in student writing.

Bill McCleary
Composition Chronicle Editor
SUNY College at Cortland
Livonia, NY 14487

PRACTICUM

Business Management Shadowing Experience

Thomas E. Marshall

Thomas E. Marshall shares a seven-step assignment, called the "shadowing experience," which is designed to assist management students in meeting the main objectives of an introductory course. The JOURNAL felt that many of you would find this very helpful.

As a marketing/management faculty member at Owens Community College in Findlay, Ohio, I have an opportunity to teach the first management course, Business Management 120. The main objective of this course is to introduce basic management principles and to give the student an opportunity to determine if a career in management is for her or him.

A seven-step assignment commonly called the "shadowing experience" is very effective in assisting each student to meet the main objectives of the course. The first step is to identify an industry or type of business that the student interested in learning more about.

The second step is to identify a manager to shadow. The third step is to get approval of the instructor for the choice. The fourth step is to spend eight hours with that manager. The student follows, or "shadows," a manager for an entire work day and observes the manager doing daily activities.

To make this eight hours an effective learning experience, both the student and the manager do some advanced planning, using the five P's of management: Proper Planning Prevents Poor Performance. If possible, the student should sit in on committee meetings to see how the manager interacts with supervisors and subordinates. The student should observe as the manager handles problems and performs the functions of management that are taught in class: planning, organizing, directing, motivating, and controlling. Does the manager follow the assumptions of McGregor's Theory X or Theory Y? Does the student feel the manager is proactive or reactive? Has the organization adopted Total Quality Management, and if so, can the student see a quality circle actually solve a problem? Can the student observe real employee participation in decision making, or is it just window dressing?

This assignment is introduced on the first day of class with the distribution of an assignment sheet. A student is advised to be thinking of what industry he or she would like to learn about, and the manager one would like to shadow, but not actually to do the shadowing until toward the end of the course. This delay gives the instructor a chance to present some management theory and concepts that a student should look for and hopefully observe during her or his eight hours of shadowing.

When I designed this assignment, I envisioned a traditional student (18-22 years old), who has held part-time and summer jobs (McDonald's), but who didn't have any management experience. Such a student quickly becomes aware of how much work a manager does in an average day. A traditional student can use this assignment to explore a career in management in a specific industry.

The average student at Owens, however, is 29 years old; furthermore, there

many are nontraditional especially in the evening classes, with a entry-level management job. Such a student complains that he or she does not have time to spend eight hours without being paid. An instructor should not listen to this kind of protest. I have found in my limited teaching experience that there is a direct correlation between how much complaining heard and the value of the assignment. Therefore, if no complaining or excuses about the assignment, the instructor can be sure that the assignment is not very valuable.

The nontraditional student's second major concern is "Do I have to do the entire eight hours at one time?" I say that it is better to observe a typical day in the life of an executive, and if possible do the eight hours all at once. However, if it is more convenient for a manager and/or student to split the eight-hour shadowing into two four-hour sessions or four two-hour sessions, I give my consent.

The shadowing experience can be very beneficial to a nontraditional student. A frequently asked question is "Can I do the shadowing experience with my current employer?" I usually agree if I am convinced that learning can occur. If a student's employer is a small company where there is a single manager or owner, I have the student develop three learning objectives, not part of the student's regular duties for the project. If the student works for a large organization, I suggest seeking an experience with someone as high in the organization as possible, as opposed to an immediate supervisor.

One nontraditional student in my class (early 30s), who worked in records and billing at Blanchard Valley Hospital, shadowed the director. The director of Blanchard Valley Hospital does not personally know many people in the billing department. This woman dressed professionally, was well prepared for the shadowing experience, and made a good impression. The director took my student to a Board of Directors meeting, introduced her to the Board, and asked for her opinion during the meeting. The shadowing experience assignment in the first-year management course has been invaluable in this woman's career at Blanchard Valley Hospital.

Another nontraditional student in my class was a victim of corporate downsizing. She was a full-time student but wanted to re-enter the workforce. She used this assignment to seek employment. Which is a better opportunity, to spend eight hours with an executive or thirty minutes with someone in the human resources department? She completed three shadowing experiences, made a good impression and was employed through the networking gained by shadowing. She still attends Owens part time to complete her degree. This shadowing experience can actually be more valuable to the nontraditional student than to the traditional one.

Step five is to have the student keep a log of the activities done during the students shadowing, then write a paper listing what he or she did on shadowing experience and reaction to the various activities. Each student is required to include in reports on how managers applied principles learned in class. In step six, the desks are arranged in a circle, and each student gives an informal presentation. Presentations give a student a chance to exchange notes and allow me to determine whether a student spent the eight hours doing the assignment or is trying to "snow" me.

The last step is a thank-you letter to each corporation where a student shadowed a manager. It is a mistake to have a student write such a letter. For one thing, the instructor may never be sure that the letter was actually written and received. Further, a thank-you letter from Business Management faculty on

college letterhead makes greater impact. Many corporations encourage community service, and a manager can use the letter as proof of this community service. It also helps establish and retain good relations between the college and the business community.

Shadowing in a Nutshell

STEP 1. Have each student select industry of interest

STEP 2. Have each student select managers he or she would like to shadow

STEP 3. Professor should approve the shadowing experience

STEP 4. Each student actually does the eight hours of shadowing

STEP 5. Each student write reports of the shadowing experiences

STEP 6. Each student give a class presentations on the shadowing experiences

STEP 7. Professor writes thank-you letters to managers who agreed to be shadowed

Thomas E. Marshall
Marketing/Management Faculty
Owens Community College
Toledo, OH 43689

FORUM

Issue: To what extent should two-year colleges utilize the internet as an instructional and marketing tool?

Lincoln's Legs & 'Lectric Links

David M. Humphreys

The internet has come upon us so rapidly, so vast, and so pondering that the two-year college faculty and administration must ask themselves how best to utilize it. David Humphreys of Cuyahoga Community College and Thomas Bowman of the Ohio State Agricultural Technical Institute discuss this very problem.

When asked how long a man's leg should be, Abraham Lincoln is rumored to have said, "Long enough to reach the floor."

To this rather uneasy question on computers and the Internet, one might offer a comparable answer: To the extent that they do the job.

It has become a truism to say that the computer and the Internet are simply tools, and in this case, education is the job they have to do. As we move into the twenty-first century, the role of technology in doing that job will just get larger and larger. The Congressional Office of Technology Assessment report (1993) notes several advantages of technology for education that account for this growth; technology

- reaches learners outside of classrooms;
- uses learning time more efficiently;
- sustains motivation;
- individualizes instruction; and
- provides access to information tools

(Sylvia Charp. "Technological Literacy for the Workplace." *T.H.E. Journal* 23.8 (March 1996): 6.)

The amount of information that is currently available to our students through the Internet staggers the imagination. Think of what it will be like as the Library of Congress, for example, completes its promise to digitize 107 million of the most significant items in the nation's research libraries-texts, photos, audio recordings, and videos-and make them available on-line.

In the next few years, most of our students will have access to the Internet from home and at work. AT&T, Sprint, MCI, Ameritech, the cable companies, even the satellite television companies are joining American Online and Compuserve in a monster free-for-all that will provide nearly every home in America with Internet access. You certainly won't get away from technology at work; "Companies recognize continuous learning is essential to their growth and development. According to *Training Magazine's* 1995 industry report, about 48% of companies with more than 100 employees are involved with computer-based training" (Charp 6).

As state legislatures balk at the idea of expanding the physical space for each college, educators will have to look to new means of delivering instruction to their students at some remove from the schools themselves. "The reality is that most

public institutions will probably need to develop a mix of on-campus and distance education courses in order to remain affordable," argues Kay J. Kohl, Executive Director, National University Continuing Education Association. By the year 2000, some educators forecast, nearly half of our students will be learning by way of the Internet or the television. (You can reach their home page on the World Wide Web listing a number of sites offering distance education at http://homepage.interaccess.com/~ghoyle/college.html.)

Lewis Perelman prophesied in his book *School's Out*, "The Atomic bomb changed everything but our thinking; hyperlearning will change everything and our thinking" (Lewis J. Perelman, *School's Out*. New York; Avon, 1993). For sure, hyperlearning is changing the way we learn. John Graham, one of Sinclair Community College's Internet gurus, maintains that "From an instructional point of view, the Internet lets students construct knowledge in an asynchronous way, which means in a way that makes sense to them" ("The Internet and Sinclair: Keeping up with the Future." *CILlabus* Fall 1995; 2). When the instructor puts materials onto the net, students can work on it in their own time and at their own pace. Because it "makes sense" to the students, it makes for better learning.

But the increasing use of hypertext also expands the control the student has over his or her learning. Hypertext adds to the usual linear organization of standard text the opportunity to pursue branches to other parts of the document, even to other related documents on other computers around the world. Readers can follow the basically linear design of the author's primary document or look for associated tracks to deepen their knowledge. Hypertext takes reader-response theory to a new level.

Now while it would be easy to continue this paean to the PC, it is important that we don't lose sight of the unease that I think underlies the asking of this question: does this new technology spell, as Lewis Perelman suggests, the end of schools as we have come to know and earn our living from them? Will machines replace the teacher in the classroom?

Perhaps it's not much more than putting up a brave front, but I don't think Perelman's prediction is completely accurate. The machine will undoubtedly increase its presence in the groves of academe, but there will remain a strong "stand" of live teachers to carry on.

For one thing, our first efforts at distance education have taught us that not every student is right for this kind of learning. Learning at a distance or through a computer module takes a self-directed student, one who has the motivation and the requisite skills to work in some degree of isolation. Students who have trouble with basic reading or computing may be helped by computers, but I don't think such students can carry the full burden of their own education. The computer will be an important tool, but a tool that will only be as effective as the teacher who frames its use.

One would have had to have been dead for the last three years not to have heard education's catchy new mantra: "be guide on the side, not the sage of the stage." Faddishness aside, it makes good sense to free the student up to learn, to give the student more control of the learning process. Computers and the Internet help to make the freedom possible. Students will have more freedom to choose the time and place in which to learn; the Internet and other computer related media like CD-ROM will expand the range of student learning; hypertext will give the students greater freedom to manage their discovery learning, virtual learning communities out on the networks will offer students a community of peers and experts in which to learn and practice the discourse of their discipline.

Learning to use this technology effectively is no doubt difficult and, at times,

painful. It will challenge us to define our roles in new ways. But we have to master it and channel it to serve education's goals. For certainly, if we fail to develop the use of computers and the Internet – no matter the length of our own legs—we'll be "the bore out the door."

David M. Humphreys
Professor of English
Cuyahoga Community College East
Warrensville Twp. 44122

The Internet: A Broadening Experience

Thomas L. Bowman

With an increasing number of high schools and public libraries now providing connectivity to the Internet, two-year college admissions officers can make extensive use of the Internet as a marketing tool. Colleges can now provide on the Internet a variety of information such as virtual walking tours of their campuses; on-line requests for informational literature, perhaps by department or major; and on-line applications for admission. Campus life activities [text, images, and sounds] can be immediately shared with the Internet community illustrating the vibrancy of the college. This can be done on the World Wide Web with the college's own web pages or by contracting with commercial services which provide listings of colleges and universities. The Internet is an easy way to extend recruitment activities to those that might not be served by recruiters on the road.

Perhaps a much greater benefit to two-year colleges is the use of the Internet as an instructional tool. The Internet is a tremendous source of information world wide. The OhioLINK consortium of 43 colleges, universities, and governmental libraries in the State of Ohio expands student access to holdings of 34 libraries and, by the end of 1996, to almost 70 databases. In addition, an even larger library information network called OCLC provides access to more than 21,000 libraries in the US and 63 foreign countries. Besides the OhioLINK and OCLC electronic libraries, access to the holdings of hundreds of museums around the world, many databases, and governmental documents such as the Federal Register is immediately available. Faculty and students can do keyword searches of the entire Internet to locate specific resources using a variety of fast, powerful search engines.

The use of the Internet can broaden instructional methodology. Collaborative learning can be extended beyond the local classroom or campus to the world involving peoples from a multitude of cultural backgrounds and viewpoints. There can be immediate exchange of information among people and schools by means of e-mail and ftp. The sharing of course and curricular materials among faculty is easily done using the Internet. Coauthorship of manuscripts is made faster and easier by use of e-mail and ftp. Two-year colleges can use the Internet for distance learning to extend their course offerings to students beyond their campus; through collaboration with other schools, they can offer their students access to courses at those schools not available on their own campus. All of this will become increasingly easier as teleconferencing technology is improved in the very near future.

Colleges, faculty, and students that do not make extensive use of Internet resources as instructional tools will be left behind in the 21st century.

The resources available at http://www.syllabus.com provide some good examples for using the Internet as instructional and marketing tools .

Thomas L. Bowman
Associate Professor of Chemistry
Ohio State Agricultural Technical Institute
Wooster, OH 44691

REACTION

Response to "The Simultaneous Teaching of Accounting and Economics to the Two-Year Student"

Frank Jennings

The JOURNAL *encourages letters and articles in response to its contents policies, and OATYC activities.*

In today's academic environment, the development of critical thinking skills, conceptual reasoning, and mental flexibility are of paramount importance. The development in the student of the ability to learn on his/her own is a major goal of education. This leads to the realization by the student that education will be a lifelong process, both in the academic setting and in his/her professional life. This also leads to the possible conclusion that the academic process, in any given class subject, may be more important than the specific content delivered.

Mr. Lindeman has made many interesting observations about the similarities and differences of accounting/economics courses and the respective teaching methods of each. I found Mr. Lindeman's article to be informative and helpful, but I believe my teaching style of accounting has a somewhat different emphasis.

I stress the decision usefulness objective of accounting information, especially in managerial accounting, but it is also important to recognize the qualitative (non-quantitative aspects) in the decision making process. The human-resource management (HRM) people have a critical role to play. Research has shown that different managerial costing personnel will draw different conclusions, from the same managerial accounting information, based on their psychological profile. This relates to the Rational Expectations Theory developed in economics in recent decades.

In my teaching of accounting and economics, both courses are approached from a logic structure point of view (inductive and deductive reasoning combined with conceptual thinking as in say for example teaching geometry). An effort is made to minimize memorization (especially memorization without understanding). Having an engineering and mathematics undergraduate background is probably a primary factor in developing this pedagogical point of view.

At the very beginning of introductory accounting, many terms are defined as in any course. After defining debit, credit, the T-Account concept, and the double entry bookkeeping principle, only one more definition is needed for all of the so-called debit/credit rules to be logical outcomes. The last definition needed is that

we will adopt the criteria that debits increase assets; then after this last definition, all the debit/credit outcomes are logic. Many exercises and problems are worked with the objective to internalize the basic knowledge, but always with an awareness of the logic system, so as to avoid inconsistent handling of the same or similar situations. This approach is applied throughout the complete accounting cycle.

In introductory accounting when covering topics having a unifying conceptual basis, this basis is highlighted. For example, when covering warranty expense estimated in advance, the topic is related to bad debts expense estimated in advance which is covered earlier in the course. The common conceptual basis is easy to convey while the estimating techniques and the time frames are different. In this same context, the student is now conceptually readied for FAS 106 implemented in 1992 "Post Retirement Benefits Other Than Pensions" meaning retirees covered medical expenses. The previous expense and pay as you go approach can now be seen as conceptually inconsistent with bad debts and warranty expense estimates in advance. Now when the student looks at the pro/con arguments about FAS 106, he/she sees the sociological/political systems at work. We can see some of society's value systems at work and in conflict through the implementation of FAS 106; for example, note the GM 1992 annual report and footnotes regarding FAS 106.

FAS 115 "Accounting for Certain Investments In Debt and Equity Securities" moves financial accounting in the direction of economics by the process of mark to the market in the case of certain debt and equity securities. Although the Financial Accounting Standards Board (FASB) makes pronouncements for "proper" accounting treatment, it is in constant deliberation. As a result, many pronouncements become nullified when a later consensus is made (or politics come into play). This is similar to economics, where "students are encouraged to be critical thinkers in that 'permanent' theories are subject to the test of time, and may well be revised," as with FAS 115 which replaced and/or modified in part many earlier pronouncements. If one applied as an income measure exit value accounting theory, net of tax, on a constant dollar basis, then one would arrive at or very close to Fisher's definition of economic income. The demands of the annual audit function have a major impact on FASB pronouncements.

Managerial accounting is subject to even faster continuous change, involving critical thinking and value judgements with less memorization than financial accounting. Managerial accounting involves significant overlap with economic thinking.

In conclusion, in first-year accounting I also focus on concepts and logic structures while trying to develop critical thinking skills along with an understanding of the basic knowledge. It is important for the student to become aware of qualitative factors in decision making and the evolving changes of the accounting profession as it is impacted by society's values. An introductory student does not have to understand the FAS in depth, or know how to make the actuarial estimates, to see the big picture. An awareness of the larger perspective is beneficial. Quite possibly one could say that all knowledge is conditional and tentative, subject to change, examine the medical profession.

Frank Jennings
Instructor, Accounting, Economics, Computer Science, Mathematics, and Personnel Management
Ohio State Agricultural Technical Institute
Wooster Campus
Wooster, Ohio 44691

The Jerry McClain Co., Inc.

Custom homes, Northern Products log homes, residential remodeling, light commercial construction and residential and commercial condominums.

Design – Quality – Service

51 North Third Street
Suite 701
Newark, OH 43055

Phone
(614) 345-3700

The Editorial Board of the OATYC Journal *is soliciting written responses (three or four paragraphs) to the question:* ***ISSUE: What should an effective program for assessing two-year college faculty grading of students be?*** *The response should address one of the many possible perspectives. Here is your chance to participate, and the Board encourages you to do so. As determined by the Board, the best responses will be published in the next edition's "Forum" section,* **deadline: August 1, 1996.**

OATYC Journal Campus Solicitors

Belmont Technical College, Rusty Stevens
Bowling Green State University, Firelands Branch, Robin Garland

Central Ohio Technical College, Scott Wilson
Cincinnati State Community and Technical College, Jim Marcotte
Clark State Community College, Barbara Valley
Columbus State Community College, Rita Bova
Cuyahoga Community College East, Thomas Morris
Cuyahoga Community College Metro, Stanley Klosek
Cuyahoga Community College West, Arthur Polen

Edison State Community College, Linda Verceles

Kent State University, Ashtabula Campus, Harold Darlymple
Kent State University, East Liverpool Campus, Kevin Edwards
Kent State University, Geauga Campus, Janet Paxton
Kent State University, Salem Campus, James Cooney
Kent State University, Stark County Campus, Judy Ohles
Kent State University, Tuscarawas Campus, Agnes K. Swigart
Kent State University, Trumbull Campus, Janet Crawford

Lakeland Community College, Sig Sugg
Lima Technical College, Will Wells
Lorain County Community College, Marilyn Valentino

Miami University, Hamilton Campus, Lee Sanders
Miami University, Middletown Campus, Gary Wheeler
Muskingum Area Technical College, Cherie White

North Central Technical College, Bruce Sliney
Northwest State Community College, James Nagel

Ohio State Agricultural Technical Institute, Linda Houston

Ohio State University, Lima Campus, John Fallon
Ohio State University, Newark Campus, Robert Klingensmith
Ohio University, Belmont Campus, Thomas Flynn
Ohio University, Chillicothe Campus, J. Steven Phillips
Owens State Community College, Gary Bazer

Raymond Walters University College, James E. Cebula
Rio Grande Community College, Vickie Crabtree

Sinclair Community College, Tom Preisser
Southern State Community College, Kenneth Store
Stark Technical College, Thenice Gall

Terra State Community College, Roger Bober

The University of Akron Community and Technical College, Anna Maria Barnum
The University of Akron, Wayne College, Robert McElwee
University of Cincinnati Clermont College, Karen Williams
University of Cincinnati College of Applied Science, Frederick Krynan
University of Toledo Community and Technical College, Judy Hanneken

Washington State Community College, Arthur Molitierno

Youngstown State College of Health and Human Services, Robert Campbell

OATYC Officers: 1995-96

President: Barb Valley, Clark State Community College, 570 East Leffel Lane, Springfield, Ohio 45505 (513) 328-6148

President-Elect: Carolyn McCluskey, Jefferson State Community College, 4000 Sunset Blvd., Steubenville, Ohio 43952-3598 (614) 264-5591

Past President: Marilyn Valentino, Lorain County Community College, 1005 N. Abbe Road, Elyria, Ohio 44035 (216) 365-5222, Ext. 7103

Secretary: John Fallon, Lima Technical College, 4240 Campus Drive, Lima, OH 45804 (419) 221-1112, Ext. 292

Treasurer: Russell K. Davis, III, University of Akron, CTC, 304 East Buchtel Avenue, Akron, OH 44235-6002 (330) 972-7391

Board of Directors: 1995-96

Ray McBeth, Wayne College, University of Akron, 304 East Buchtel Ave. Akron, OHio 44325 (800) 221-8308, Ext. 8772

Thomas Preisser, Sinclair Community College, 444 West Third Street, Dayton, OH 45402 (513) 226-2830.

Carol Nelson-Burns, University of Toledo, CTC, Scott Park Campus, Toledo, Ohio 43606-3390 (419) 530-3318

Susan Henderson, Muskingum Area Technical College, 1555 Newark Rd., Zanesville, Ohio 43701 (614) 454-2501, Ext. 243

Linda Houston, Ohio State-ATI, 1328 Dover Road, Wooster, Ohio 44691-4000 (330) 264-3911, Ext. 1245 or (800) 647-8283 (Ohio only)

OATYC CAMPUS LIAISON LIST - 1995-96

Belmont Technical College
Rusty Stevens
(614) 695-9500

Bowling Green State University-Firelands
R. Darby Williams
(419) 433-5560

Central Ohio Technical College
Scott Wilson
(614) 366-1351

Cincinnati State Technical & Community College
Jim Marcotte
(513) 569-1618

Clark State Community College
Barbara Valley
(513) 328-6148

Columbus State Community College
Anne Peterson
(614) 227-5077

Cuyahoga Community College-Career Resources Institute
Allie Dunham
(216) 987-4048

Cuyahoga Community College-Eastern
Dave Humphreys
(216) 987-6000

Cuyahoga Community College -Metro
Nancy Roberts-Harrington
(216) 987-4000

Cuyahoga Community College -Western
G. Paul Kemp
(216) 987-5000

Edison State Community College
Linda Verceles
(513) 778-8600

Hocking College
Elaine Dabelko
(614) 753-3591

Jefferson State Community College
Carolyn McCluskey
(614) 264-5591

Kent State University-Ashtabula
John Mahon
(216) 964-3322

Kent State University-East Liverpool
Suzanne Fitzgerald
(330) 385-3805

Kent State University-Geauga
Christopher Williams
(330) 834-4187

Kent State University-Salem
Dick Jones
(330) 332-0361

Kent State University-Stark
William Bittle
(330) 499-9600

Kent State University-Trumbull
David Allen
(330) 678-4281

Kent State University-Tuscarawas
Agnes Swigart
(330) 339-3391

Lakeland Community College
Sig Sugg
(216) 953-7342

Lima Technical College
John Fallon
(419) 221-1112

Lorain County Community College
Lou Saurez
(216) 365-4191

Marion Technical College
Nancy Gilson
(614) 389-4636

Miami University Hamilton
Lee Sanders
(513) 863-8833

Miami University Middletown
Gary Wheeler
(513) 727-3200

Muskingum Area Technical College
Cherie White
(614) 454-2501

North Central Technical College
Bruce Sliney
(419) 755-4800

Northwest State Community College
Don Spohler
(419) 267-5511

Ohio State Agricultural Technical Institute
Linda Houston
(330) 264-3911

Ohio State University-Lima
Mark Kleffner
(419) 221-1112

Ohio State University-Mansfield
Frederick Dahlstrand
(419) 755-4011

Ohio State University-Marion
Lynn Corbin
(614) 389-2361

Ohio University-Belmont
James W. Newton
(614) 695-1720

Ohio University-Chillicothe
Delbert E. Myers
(614) 775-9500

Ohio University--Ironton
Bill W. Dingus
(614) 533-4600

Ohio University-Lancaster
Raymond S. Wikles
(614) 654-6711

Ohio University-University College
Patricia B. Richard
(614) 594-6495

Ohio University-Zanesville
Craig Laubenthal
(614)453-0762

Owens State Community College
Gerry Bazer
(419) 666-0580

Rio Grande Community College
Vickie Crabtree
(614) 245-5353

Sinclair Community College
Thomas M. Preisser
(513) 226-2500

Southern State Community College
Don Storer
(513) 393-3431

Stark Technical College
John Thornton
(330) 966-5458

Terra State Community College
Robert P. Bober
(419) 334-3886

University of Akron, Community and Technical College
Russ Davis
(330) 375-7220

University of Akron, Wayne College
Robert L.McElwee
(330) 683-2010

University of Cincinnati, Clermont College
Roger J. Barry
(513) 732-5200

University of Cincinnati College of Applied Science
Frederick Krynan
(513) 556-6567

University of Cincinnati, Raymond Walters College
Barbara Bardes
(513) 745-5600

University of Cincinnati University College
Marylyn Smith
(513) 556-1667

University of Toledo Community and Technical College
Judy Hanneken
(419) 530-3393

Washington State Community College
Peggy Peterson
(614) 374-8716

Wright State University-Lake Campus
Arthur Molitierno
(419) 537-3126

Youngstown State University
Robert Campbell
(330) 742-3000

OATYC
JOURNAL

Linda Houston, Editor
Ohio Association of Two-Year Colleges
Central Ohio Technical College
University Drive
Newark, OH 43055, (614) 366-9289

NON-PROFIT ORG.
U.S. POSTAGE
PAID
PERMIT NO. 52
NEWARK, OHIO